BIRDS of FIELD FOREST and PARK

ALBERT FIELD GILMORE

BIRDS OF FIELD, FOREST AND PARK

Courtesy of the National Association of Audubon Societies

CHEWINK

Upper figure — female. Lower figure — male.

BIRDS *of* FIELD, FOREST *and* PARK

By ALBERT FIELD GILMORE

WITH A FOREWORD BY
T. GILBERT PEARSON
Secretary of The National Association of Audubon Societies

WITH ILLUSTRATIONS BY
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TO K. M. G.

Whose sympathy and encouragement in the study and cheerful companionship in the field have greatly lessened the labor of its preparation, this volume is affectionately dedicated.

FOREWORD

No man or woman of the coming generation can lay claim to a broad education who does not have at least a speaking acquaintance with the wild birds and animals of the country. Public sentiment will demand this.

We all know persons who are skilled in belles lettres, who know the languages of various peoples, and have wide familiarity with the history of what man has done; persons who have travelled much and acquired learning in the various fine arts, but who have no knowledge of the names or habits of any of the fourteen hundred kinds of wild birds found in North America. Their knowledge is replete as to the things man has done, but regarding the works of Nature they are ignorant. They know nothing of the soil formation; of the history of the rocks over which they walk. They cannot name the trees in whose shade they stand, and their ears are deaf to the songs of the birds that reach them from the fields and roads.

Such a person, if left alone in the country for a day without human companionship, or a book to read, is usually miserable until relief arrives. The wild life of the open means nothing to him.

Today, in every State of the Union, thousands of intelligent teachers are mingling with their daily tasks some instruction regarding the habits of wild birds and their value to mankind.

Within the past ten years more bird books have been sold in the United States than during the entire previous history of this country. From Maine to California there is a great awakening to the fact that birds are of inestimable value to mankind and that their study is worthy to be placed alongside of those subjects which heretofore have so strongly claimed the attention of the educator.

When the men of today were schoolboys they were not taught bird study, and, in a way, are not to be blamed for their present ignorance of the subject. There were few laws in those days to protect birds. Today, within our boundaries, there is not a useful bird that has not had thrown about it the protecting arm of the law, and it is intensely important that children be given a knowledge of this fact and taught the reasons why these wild creatures should be protected and increased.

I believe this book has an extremely important mission. It will be read and studied by numberless readers, who from its pages will receive their first strong impressions of the beauty and value that come from an intimate knowledge of our wild bird life; and its author will have the blessed privilege of knowing that he has been responsible for starting many on the first step of that staircase that leads the student to the treasures in the vast storehouse of Nature.

T. Gilbert Pearson,
Secretary of the National Association of Audubon Societies.

PREFACE

THE success of the little book "Birds Through the Year" in stimulating among its readers a desire to make the acquaintance in the open of the birds described therein, has prompted the author to prepare this somewhat more pretentious volume.

This is in no sense a treatise on the science of ornithology, but the effort is made to reproduce the atmosphere of the natural home of the bird in field, forest and park, by describing the conditions under which each variety is found, and their usual surroundings, as well as their habits, plumage, songs, etc. About one hundred and fifty varieties are thus described, including those most common in eastern North America. While the classification recognized by the American Ornithological Union has been followed, the Latin names have been avoided, as well as those purely technical terms that are unfamiliar to the layman.

The author's observations of bird life, covering a period of more than thirty years, have been made for the most part in his home state, Maine, in the region about New York City, New Jersey, the Catskill Mountains, and in the Southern States.

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BIRDS OF FIELD, FOREST AND PARK

Chapter I

A BIRD'S YEAR

"I hear the wild geese honking
From out the misty night,—
A sound of moving armies
On-sweeping in their might;
The river ice is drifting
Beneath their northward flight."

—Burroughs.

With the first sign of yielding on the part of grim winter there is a stir throughout all bird-land. As spring comes on apace, up from the South moves the restless host and scatters over the entire northland until every field, forest and park has its quota of feathered tenants. So regular are the comings and goings of these messengers that they have been aptly termed the "mail carriers of the seasons." To one who has the love of Nature's melodies in his heart and whose eye is keen to appreciate her beauties, the advent in early March of the first Bluebird, Robin, or Song Sparrow is a very important event in the calendar. Not only does their coming mark the approaching end of the dreary season of cold and snow when life in the open is at its lowest ebb,

but it announces in no uncertain tones the advent of spring with her many and varied attractions. Who does not feel a thrill of vernal joy when on some bleak and sunless day in March there comes to his eager ears the trumpet-like *honk*, *honk*, *honk* of wild geese as they make their hurried way across the leaden sky, bound north? It is with keen admiration and a feeling akin to awe that one beholds the sudden appearance of these hardy forerunners of the migrating army; and one wonders at the strange instinct that prompts them to leave their comfortable quarters in the distant southland and start upon what seems to us a long and wearisome journey, whose goal is the frozen and forbidding north.

In bird land life is a constant change, and the events of a year make a complete cycle. With those birds that migrate, the winter months are passed amid scenes which suit the individual taste of each variety; and to the migrant headed southward the choice of locality is surely a broad one. No doubt food habits play a very important part in the selection. To be sure of an adequate supply of their favorite food, the Flycatchers journey to the land where Jack Frost rarely, if ever, visits; while seed and berry eaters may remain where the weather is much colder, the hardier varieties even in the land of snow and zero temperature. That hardy denizen of the north woods, the Ruffed Grouse, whose favorite food is the delicate buds of birch, maple and apple-tree, finds cold weather and deep snows little hindrance to his well-being; in fact, I have sometimes thought, when coming unexpectedly

CATBIRD

upon a Grouse in midwinter, that the severe weather adds strength to his sturdy wings.

During the winter months most migrants, often in loose bands made up of several varieties having similar feeding habits, lead a nomadic life, apparently care free except for the necessity, which they constantly face, of securing the daily food supply. So generously does bountiful Nature provide for her children this is not usually a difficult task. Birds do not have the instinct which many animals possess of storing food in excess of their immediate needs for use in winter, hence the daily quest; neither do they sleep the time away as do many animals.

Those birds that eat seeds and berries, as Robins, Bluebirds, Catbirds, Sparrows and Finches, find their winter food in our Southern States. The insect-eaters as a rule go farther south, below the frost line, to southern Florida, Mexico, Central and South America. Woodpeckers find the grubs they eat under the bark and in the wood of dead and decaying trees; so that their food problem does not necessitate migration. Sometimes Song and White-throated Sparrows and Myrtle Warblers find their winter food as far north as New York City. Then they do not migrate. In a clump of cedars just north of Sheepshead Bay, Brooklyn, where the catbrier and poison ivy form a dense tangle, I have often found these birds as late as the end of December; and they sometimes stay there all winter.

Several months are passed in this easy-going sort of an existence. But the first breath of spring which has its beginning in some indefin-

able region to the southward, seems to stir our bird friends there to memories of happy nesting sites amid summer's flower-strewn fields and parks, or shady forests far away to the north. With some varieties, as the Robins, the preliminary to the journey is a great gathering of the clans, sometimes tens of thousands in a loose flock scattered over miles of country. After a few days of socializing, they break up into small squads and, in response to the migrating instinct, set out upon a journey, long or short, according to the relative location of the winter haunt and summer nesting ground.

All the members of a given family move at about the same time and, if the observation is made south of their nesting-grounds, usually pass a given point in a few days after the first individual of that species appears. Then they are seen no more until the return in the late summer or fall. I see the Fox Sparrows in goodly numbers about the parks of Brooklyn during the first days of April. In about two weeks they pass northward and are not seen again until their return journey in late fall.

Among migrants the bolder and stronger, and those that feed on the wing, fly by day, the more timid by night, when they seem to feel a greater sense of security from their natural enemies. At intervals they stop for food and rest, whenever suitable cover is found, oftentimes even in the heart of a great city. In the shrubbery of the city parks and backyards during the migrations of spring and fall will be found interesting visitors, distinguished strangers, of whose presence

one is little aware unless the eye and ear be keen for their coming. Sometimes, if the cats are not too numerous, they will tarry for a few days in a sheltered yard where food may be had.

The great highways of the air, which are traversed every spring and fall by millions upon millions of birds, have a general course that conforms with the direction of the coast line and the river valleys. During fair weather the flight is high, probably more than a mile above the earth, where their progress is unobstructed. But when fog and rain set in, the flight is much lower and they are often confused as to their proper course. Then it is that many come to untimely death by striking against lighthouses, tall buildings, telegraph and other wires. During a prolonged storm the loss of life among migrating birds from these causes is appalling; and this is only one of the many dangers that beset these plucky little travelers. In many of our States, particularly in the south, the laws for the protection of birds are wholly inadequate, so that even during the spring migration whenever they seek shelter to rest and feed they are pursued by hunters. They are also sadly beset by the ubiquitous cat. Besides, songbirds in migration fall prey to the feathered hunters, the Hawk and Owl, that find easy victims in the host of travelers. Yet, despite all dangers, myriads of these heralds of the spring arrive in safety, dressed in their gayest suits, bubbling over with happy songs to cheer and entertain us during the golden months of summer.

With strong fliers like Loons, Ducks, Geese,

Swallows, etc., the journey is rapid and direct and occupies but a few days, even though the distance covered is long. For those birds, also, that winter in the near-by south the journey, though made leisurely, occupies but a few days. In marked contrast to these are the movements of those far travelers, whose journeyings are little short of marvelous. The Bobolink winters in central Brazil, and the routes to and from the winter home, especially of those that breed in our Western States, are very indirect. They travel leisurely through the Southern States where as Reedbirds and later as Ricebirds they are considered fair game for the hunter, because of their fat, plump bodies. Leaving the confines of the United States by the way of Florida, they fly across the ninety miles of sea to Cuba, proceed along that island, thence to the Leeward and Windward Islands by easy flight, finally reaching the shore of South America, whence the remaining distance to their winter haunts in central Brazil is leisurely made. Despite the long distance traveled, their goings and comings are made with great regularity and we can predict with much certainty when they will arrive in early May. Mr. Chapman points out that Bobolinks were formerly found in summer only in our Eastern States, but they have gradually moved west until now they are found beyond the Mississippi, even as far as the Rocky Mountains. And yet when the migration begins in the fall, these western dwellers travel eastward to join their brethren for the long journey, notwithstanding that their winter home could be

reached by a much shorter land route via Mexico and Central America. Truly instinct is a strange and exacting master! The Golden Plover winters in far-away Patagonia but builds its nest within the Arctic Circle, covering twice each year a journey of nearly or quite ten thousand miles. Is it not a strange and powerful impulse that prompts birds to cover these enormous distances with all the perils and vicissitudes incident thereto?

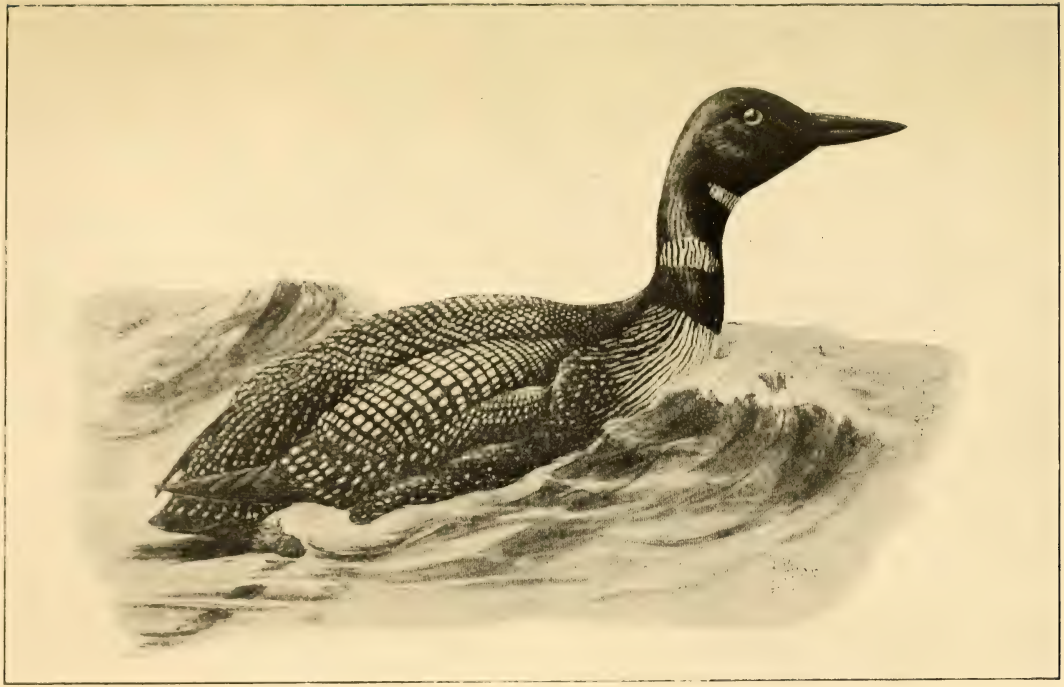
The cause of these movements is still a mystery, although scientists have given much attention to the matter. The most reasonable explanation seems to be that they had their beginnings ages ago when the ice cap which covered a great portion of the Northern Hemisphere receded and advanced under varying conditions of temperature. It seems that much force is given to this theory by the fact that birds of the southern hemisphere where the ice movements did not occur do not, as a rule, migrate, but are permanent residents in their various localities. It seems clear that the migratory movement can scarcely result from the food problem alone, or the desire for secure nesting places, for in either case the northern journey would not necessarily help them.

The relative time of the arrival of the many varieties that make up the vast bird army naturally depends upon one's location. The slow fliers arrive in the latitude of New York City a week or ten days earlier than in central New England and northern New York, and about two weeks earlier than in northern Maine.

Of course the fast travelers cover these distances in a much shorter time. The duration of the spring migration is about eighty days, extending from early March to late May. In the autumn the southward movement is made more leisurely, extending from mid-August to late November or early December. At this season they seem in no hurry and many of the hardier varieties linger until the real grip of winter is felt.

The northward journey is ended when the bird has arrived in nesting grounds which are to its liking. As a rule, members of a given variety occupy the same general region, the area of which varies greatly with the different species. A few stragglers will venture farther than the majority of the species, and a few laggards stay somewhat behind the main body; but they occupy pretty definite zones, except as the summer range is influenced by altitude. In mountainous regions will be found nesting birds belonging to a species the main body of which occupies a lower region, often much farther north. For example, along the Allegheny and Blue Ridge Mountains will be found as summer residents a few varieties of which the great majority are much farther north, perhaps in northern New England or Canada.

There have been lodged in the public mind many interesting but highly erroneous beliefs regarding the migration of birds, arising, no doubt, from the mystery that attaches to their sudden appearance in the spring and their equally sudden departure in the fall. In Eng-



LOON

land it was long believed that Swallows hibernate in the mud as do frogs. Even so keen an observer as Gilbert White held to this belief, and probably this strange notion has not yet been wholly eradicated from the minds of men. The old Penobscot Indian who sometimes acts in the capacity of guide on my excursions into the north woods assures me that his tribe believe that all the "little chip birds" make the long migrating journey by clinging to the backs of the larger birds, strong fliers as Loons, Geese, Ducks, Herons, etc., stealing a ride as it were. A lady recently asked me if it were true, as her pastor had explained, that Swallows carry food under their wings for use during the migration. While one may understand how these fantastic beliefs may have been held by ignorant persons a century or more ago and by illiterate Indians, it is not easy to understand how such an idea as that held by the preacher can find lodgment in the mentality of average intelligence and of liberal education.

Very soon after arriving in the region selected for the summer home, usually as soon as the stains of travel have been removed and tired bodies rested, attention is turned to the very important matter of selecting a mate. The males then are clad in their gayest suits, and their choicest songs are ready to woo the ear of the coy female. A few varieties are said to keep the same mate year after year, but this seems rather unlikely. However, the choice is soon made, an agreement reached, and the attention of the pair is turned to the selection of a suitable

site for the nest; and as to choice of location a wide range of preference is made by the various families.

Some are expert builders, spending much time in the construction of the nest. Others are indifferent workmen, merely gathering a pile of sticks and reeds with little form and no beauty. A few varieties lay their eggs on a bare rock or a flat-roofed house with no nest at all; and one variety, the Cowbirds, lay their eggs in the nests of other birds, leaving the hatching of the eggs and the care of the fledglings to the little mother who has built the nest and has her own brood to care for. The great majority of birds, however, build substantial nests which, in some cases, serve as the home of two broods in a season; and sometimes the nest is used the second season; but this, I believe, does not often occur. Those birds whose young run as soon as hatched are the least expert nest builders.

The nest completed, the eggs are laid sometimes on consecutive days, sometimes with an interval of several days between. Then follows the period of incubation, varying with different species from ten to twenty-one days. During this time the eggs must be kept warm. This requires pretty constant attention. With some varieties the female alone sits on the eggs, being fed by the male. With other varieties the male spells her, so that she may seek her own food and rest from her irksome task. You will note when you scare a sitting bird from her nest that either flight or running is difficult at first, the muscles of the wings and legs being stiffened

from disuse. The male is usually a constant attendant upon the female, spending his time near the nest and cheering his faithful mate with his best songs.

The eggs do not all hatch on the same day, but at intervals which correspond to the time intervening between the days on which the different eggs were laid. With the coming of the helpless fledglings begins the busiest period of the year for the birds. Not only must there be an almost incessant hunt for food adequate to meet the demands of the voracious youngsters, but they must be protected from all marauders, thieving bird, snake, squirrel, or cat.

With a few families, as the Ruffed Grouse, the male bird takes no part in the care of the flock; in fact it appears that he deserts the female even before the period of incubation begins. But with practically all the song birds and many others as well, the domestic duties are shared by both parents, and they seem fully absorbed and withal very happy in the work of rearing the brood. Their efforts are attended by many difficulties, for they are beset by frequent dangers. If one watches the nests in his neighborhood for a few weeks he will be astonished at the great number of tragedies in the bird homes. Yet despite all the dangers, many households are undisturbed and the youngsters grow to maturity with no untoward accidents, adding their numbers to the growing host making ready for the return to the winter homes in the south.

As we have seen, if conditions are favorable, several varieties rear two broods in a season. A

pair of Bluebirds occupy a little Swiss chalet which we have placed on the shelf formed by the eve finish breaking around the corner of our house. When the first brood is ready to fly, they are convoyed to the orchard at the back of the house and cared for by the father, while the mother returns to the nest, lays another clutch of eggs, hatches and rears another brood. In early August the two families unite and we have a fine squad of youngsters about the lawn until autumn is well under way.

The early comers have their broods well along toward maturity before the latest migrants arrive. Early in June young Grackles and Robins, in their short-tailed, spotted coats, may be seen about the parks of Brooklyn. As a rule, however, March arrivals do not begin nest building for several weeks, until weather conditions are more favorable. The Canada Jay nests very early, sometimes in February or March, before the terrible cold of the northern winter has in any degree abated.

With the later arrivals there is less delay, except in a few notable cases of which the Cherrybird and Goldfinch are conspicuous examples. These birds spend the spring and early summer in careless roaming about the country, delaying the domestic duties until the season is well advanced. Sometimes as late as mid-August I find nests of the Cherrybird with eggs. Perhaps this delay is occasioned by the desire of the parents to provide their nestlings with some delicacy that is not earlier available. Who knows?

With many migrating birds, soon after the young are full grown, old and young gather in flocks and, for several weeks, roam happily about the country before taking up their southward journey. But prior to their departure is the moulting which follows close upon the breeding season. Then birds are very quiet. There is little song and activity of all kinds is at low ebb. Then the gay suits of the males are doffed and sober-colored coats better adapted for travel are put on.

The southward flight begins early in August. Tree and Bank Swallows are among the first to leave and several of the more delicate warblers begin their journey well ahead of the advent of Jack Frost. With these birds the stay in the nesting grounds is very short, just long enough to rear their broods, scarcely more than two months. This seems a very brief period when the length of the migration is considered. But those sturdy heralds of the spring, the Grackle, Robin, Bluebird and Song Sparrow, stay late, some of them seeming to leave with reluctance only when cheerless winter is close upon them.

The tide of southern migration is at its height from September 15 to mid-October. The army that comes in the spring has now been increased by all the broods reared, a vast host. This is rather a discouraging period for the new student of bird life, because of the change in plumage since the springtime, and the lack of song. The gayly dressed males are now in plain clothes and the host of young birds are in costume often quite unlike that of either parent. This leads to

much confusion, not to say perplexity, on the part of the student who thought he could identify all common varieties. But one should not take these difficulties too seriously, for with their return again next spring they will appear in their familiar garb.

The round of the year's happenings is completed when the winter habitat is reached again. It is a life of ceaseless activity with much of danger and many difficulties to overcome, but withal we may believe with much of joy. Under normal conditions birds seem very happy. We know little about the hardships they encounter during their absence, of the countless numbers that perish from the vicissitudes of travel. They tell no tales. They return to us clad in their best clothes, bubbling over with song, giving no sign of having grown old. We accept them as they appear, and feel a deep sense of gratitude that we live in a land selected as a summer home by the host of feathered songsters who give us much to enjoy in beautiful plumage and cheerful song.

Very little is known about the age to which birds live, except in the case of those that have been kept in confinement for many years; and probably the facts thus obtained have little relation to the length of life of the same variety in a wild state. An effort is now being made by bird students to find out definitely about the length of life of birds, the direction and extent of migratory movements, etc., by attaching small aluminum bands to the legs of young birds wherever found, bearing the name and address of the person interested. It is believed in

the course of time much can be learned in this way. Wherever one of these banded birds is found, information as to the place, date, etc., should be at once forwarded to the address on the band.

Chapter II

BIRD STUDY

"For Nature, true and like in every place,
Will hint her secret in a garden patch."
—*Nature*, Emerson.

It seems to be the common belief that bird life is confined almost exclusively to the country; that so far as the city is concerned the only opportunity to pursue this most interesting phase of nature study is found in the museums and avaries of the zoölogical gardens. That this impression is false may be easily proved. Even slight investigation will show that there is much bird life to be seen in all our towns and cities, even in New York City itself, which might be supposed to offer as little attraction to these feathered friends of ours as any city that one could name.

In all city parks, where there is suitable shelter, a goodly variety of birds will be found throughout the summer. Along the tree-shaded streets, in the gardens and on the lawns, in short wherever there is found the desired protection from their natural enemies, birds will be found in some numbers at all seasons; and during the migration periods of spring and autumn certain city parks are among the very best places to make the acquaintance of a great number of

varieties. In two hours on a Saturday afternoon in May, 1912, when the migration was at its height, I saw more than thirty different species of birds in Forest Park, Borough of Queens, New York City. In all there were several hundred birds, among them some, as the Parula Warbler, the Water Thrush, and the Yellow-bellied Flycatcher, that are considered as comparatively rare. Of the first two varieties named there were scores if not hundreds of birds. To be sure they were but travelers, halted for food and rest, yet the opportunity offered to study them was excellent, as they were quite fearless. On the two following Saturdays more than twenty varieties were found on each visit, and several settled down there to build their nests and rear their young. For more than ten years I have visited Prospect Park, Brooklyn, at all seasons of the year, except midsummer, and on no occasion, even in winter, have I failed to find some form of bird life. Starlings, imported about twenty years ago from England, have become very numerous, and these talkative little fellows are in evidence at all seasons of the year, during the fall and winter usually in large flocks. Woodpeckers and Blue Jays are permanent residents, while the summer colony is a numerous one.

In the many city parks which I have visited here and abroad, wherever there are trees and shrubbery, birds have been found. Even in the Garden of the Tuileries in Paris, a much frequented park in the heart of the city, I found that delightful singer the European Blackbird, a large Wood Pigeon, the Bullfinch and several

other varieties nesting as happily as though far distant from the turmoil of a great city. On a recent visit to Chicago, in Jackson Park, were found many nesting birds, Robins, Purple Grackles, the House Wren, Kingbirds and several Warblers. Thus one sees that these friends of man are ready to stay near him whenever he will provide home sites and shelter that are suitable for their need.

Distribution of Bird Life. Bird life is very generally distributed over the earth's surface. On mountain heights, in mid-ocean, in the great deserts, even in the Polar regions, as well as in our fields, forests and parks, birds are found. Mr. Amundsen reports having found Gulls and Penguins very near the South Pole, so that one may believe that the distribution of bird life is practically universal. Thus we see that wherever we go we may always find birds to study, under widely varying conditions in different parts of the earth.

Form. All birds have the same general form, but they differ much in the size and shape of the various parts. The peculiar structure of each species seems to be that best adapted to its habits of life. And it is generally believed that the present shape and structure of the different families is the result of ages of pursuit of certain fixed habits, especially those habits which pertain to gaining the daily food supply, the most important activity of each bird as well as the most constant. Flycatchers are keen of eye and quick of wing. Hunting birds, like Hawks and Owls, have stout legs and toes which are

armed with long, curved, and very sharp talons, perfect instruments, you would say, for striking and holding their prey. These birds also have long, curved beaks which serve as excellent hooks for tearing. Wading birds, like Herons, Cranes, Flamingoes and Snipes have long legs, while with perching birds the legs are short with slender toes having many joints, the better to cling to the perch. Swimming birds have good paddles in their webbed feet, while with diving birds, like Loons and Grebes, the stout legs are set at the extreme end of the body, a structure which gives them great power in the water, but renders walking on the land very awkward. In consequence, their nests are always close to the water. Swallows have long wings which they use with great skill and much grace, but their feet are so small that they are very poor walkers. Some of the sea birds, the Albatross and the Frigate-bird, have enormous wings and are thus able to sustain themselves in flight for very long periods. On the other hand, the Ostrich and Cassowary have wings so small in proportion to their large bodies that they cannot fly at all; but both have long and well developed legs which enable them to run with great speed. It is probable that these were once flying birds, but their wings have diminished in size because of disuse.

There is also great variation in the size and shape of the bill. The hunters, as we have seen, have sharp, hooked bills, well adapted for tearing their prey in pieces. The Woodcock and Snipe have very long and slender bills which

they use like drills for boring deep into the soft earth for worms and insects. Cranes and Herons have long, sharp bills well adapted for use in catching frogs, toads and small fish. Woodpeckers for the most part live on grubs and insects hidden in the bark and in the interior of dead trees; therefore they are provided with bills for cutting like chisels; they are the carpenters of the woods. Their feet, with two toes ahead and two behind, are perfectly adapted to clinging to the vertical trunk, and the stiff spines of their tail feathers make excellent props to support them at their work. Humming Birds have very long, slender bills which make excellent probes to reach far into the interior of flowers for the nectar, and insects imprisoned there. The seed eaters, like Sparrows, Finches and Bobolinks, have short, thick bills, just right for cracking the shell of the seed. Cone eaters, like the Crossbills, have the most peculiar bills of all. When closed, the points shut by each other as though misshapen; hence the name. But when opened for use they make a most excellent implement for tearing apart the cones. In fact, a more perfect instrument for their needs could scarcely be devised.

Thus we see in the various families great difference in the size and shape of the several parts. But usually the purpose is evident upon a little investigation, and it will be seen that the size and shape of bill, legs and wings is that best adapted to the special use made of it by the various species. Surely Mother Nature is a wise and skillful architect who never does anything

without a definite purpose, and who always adopts the very best plan.

Plumage. Plumage is the bird's clothing. It varies in thickness and color according to the needs of the individual. Those birds that live in countries of severe cold are provided with thick, warm suits that cover them completely, even to their toes, but dwellers in warm countries, including those that by migrating constantly avoid low temperatures, are much more scantily clad. The permanent residents in the north temperate zone, where the summers are hot and the winters very cold, shed many of their feathers in the season of great heat, but winter finds them fully clothed again.

Plumage of birds changes much during the period of development. With those varieties like Ducks, Loons, Geese, Sandpipers, Grouse, Partridge, etc., that leave the nest as soon as hatched, the first clothing of the youngsters is a thick, warm suit of down, velvet-like in texture. This dress is retained by the water-living birds and makes a waterproof suit of underclothing of great service in keeping their bodies dry, even though they sit on the water constantly. With those that live on the land, Sandpipers, Grouse, etc., their first covering is soon replaced by the regulation dress of feathers which serves every purpose. The young of most land birds when hatched are nearly naked, and require the mother bird's protection from heat, cold and storms. But the feathers grow so rapidly that in a very few days their bodies are well covered, the wing and tail feathers being the last to grow.

All birds oil their feathers to keep out the wet, from an oil cup nature has provided. So effective is this that in the hardest rainstorm, although they may appear drenched on the outside, yet their skins are dry.

Color of Plumage. Each variety of birds has its own distinctive colorings. A whole family, as the Sparrows or Thrushes, may have the same general colors, but each species has its own peculiar dress. With many families, as the Flycatchers, Sparrows and Swallows, there is little or no difference in the colors of the male and female, while with other varieties the difference is so marked that the relationship between the sexes would never be recognized. With the female Cardinal, Indigo Bunting and Goldfinch, there is a tinge of the dominant color of the male to lead to her identification. But the female Bobolink, Purple Finch or Scarlet Tanager so little resembles the male that she might easily be taken for another variety.

With many varieties of birds, the color of the youngsters' first suit is strikingly different from that of the grown-ups. When the colors of the male and female are unlike, the young male resembles the father, the young female, the mother. But when the parents have the same coloring, the young usually resemble them. In some varieties, as the Bobolink, where the father bird wears his gay suit for a short time only, the young resemble the female. But when the young do not resemble either of the adult birds, usually they acquire the colors of maturity when a year old, but in a few cases, not until the second or third year.

Besides the changes in color of plumage that occur with the development of the young birds, there are the interesting changes that result from the annual moulting. From the great activity of the mating and nesting season, the suit worn during the spring migration becomes much faded and frayed, so that by midsummer there is need for new clothes. By the process of moulting, the old feathers are cast off and new ones quickly replace them. At this time birds are inactive, rather shy, and apparently low spirited, for little song is heard. With many varieties it happens that the new suit is so unlike the old that we do not easily recognize the bird in his new dress, except for certain familiar call notes, poses, habits of flight, and little mannerisms which we come to associate with individual birds, as we do with human beings. At this season the male Bobolink doffs his gay suit of black, white and buff and dons the plain brownish gray suit worn by his mate all the year. That little dandy, the Goldfinch, puts away his brilliant suit of black and gold and appears in a sober dress in which the prevailing color is dull olive green. The Scarlet Tanager also changes his beautiful red suit and seems content for the balance of the year to wear the modest colors of his wife. Birds that change color at this season moult again in the early spring, when they don their bright colors for the period of song and mating. So they are supplied with two new suits each year. Truly Mother Nature is a generous provider!

Color Protection. A very interesting rela-

tion is often observed in the harmony that exists between the coloring of a bird's plumage and the prevailing tones in its usual surroundings. The Sparrow family, for the most part ground dwellers in field and pasture, have those shades of gray, brown and black which closely resemble the colors of the earth's carpet of grass stalks. The Meadow Lark, Plover and Bob White, living mostly on the ground, have similar coloring. If you visit that sturdy denizen of the woodland, the Ruffed Grouse, in his haunts, you cannot fail to note the almost perfect harmony that exists between the fine tones of gray, brown and buff of his plumage and the color of the dead leaves and mosses that carpet his forest home. But the Spruce Partridge, as his name suggests a dweller of the great spruce woods of the north where the earth is of much darker color, is almost black. Birds that dwell in lands where snow lies on the ground the greater part of the year, like the Snowy Owl and Ptarmigan, are almost white. The Snowbunting, when he comes down from the north to visit us in winter, is almost as white as the snowbank he lights upon. But all of these northern birds turn somewhat darker in the summer when rearing their broods where the snow has disappeared. This change of color is the result of wearing off the white tips of their feathers.

In the South Kensington Museum in London there are displayed several varieties of birds from the Desert of Sahara resting upon the stones and earth characteristic of their habitat. So complete is the harmony of color between

Courtesy of the National Association of Audubon Societies

MEADOW LARK

the plumage and their surroundings that they are quite protected. The Vireo family, dwellers among the thick tops of maple, birch and elm, have an olive green shade above and light colors underneath that render them quite inconspicuous in their sunlit bowers. It is not so easy, however, to recognize the relation which the more brilliantly colored birds, as the Goldfinch, Tanager, Indigo Bunting and the gayly dressed Warblers, bear to their surroundings.

That they are in a goodly degree protected by their colors seems to be well known to the birds themselves, for often they remain quiet upon the nest until one is almost upon them, no doubt believing they are safe because so closely resembling their surroundings in color. Not long ago when returning to Camp Boulder from a morning's fishing, as we rowed along shore, a pair of Blue Herons settled on a marshy spot overgrown with rushes so near us that we quite wondered at their boldness. But almost instantly after lighting they became quite inconspicuous from the blending of their colors with the prevailing shades about them. They evidently were conscious of the fact, for close as we passed they did not take wing, although so much have they been pursued by the man with a gun they are usually difficult to approach. This is a very interesting phase of bird life and offers to the student opportunity for much research.

Nests. It is during the nesting season that many birds come into the closest relationship with mankind. Then it is that they seem to be

fully conscious of the feeling of tender interest which we hold toward them, for laying aside much of their usual fear and shyness they come close about our dwellings to find suitable home sites, with evident confidence in our love and good will toward them. In fact, many varieties of birds seek nesting places close to the haunts of men, rarely breeding elsewhere. Others seek isolated nesting places as far as possible from man whom, alas, they have too much reason to fear.

In nest building birds display much skill and ingenuity. In general it may be said that the members of a given family have the same habits as to site, shape of the nest, material, etc.; and yet adaptation is often necessary to meet local conditions. In selecting a location for the nest, safety from their natural enemies, as cats, snakes, birds of prey, squirrels, etc., seems to be the main object; yet at times great stupidity is shown. A pair of Robins will build so near the ground that prowling cat or weasel could scarcely pass by a nest full of fat young fledglings. At a neighbor's house this year, a Catbird built in a bush by the back door of the kitchen, so near the ground as to invite the early attention of the cats with which the farmhouse was supplied. The fate of the poor bird is easily guessed. On the other hand, many birds seek the most inaccessible places, tops of tall trees, and high cliffs.

Most birds are good builders and take great pains in the construction of the nest which is the home of their tender young for several weeks.

With those varieties where the young leave the nest as soon as hatched, much less care is given to nest building; in fact, some varieties, as Night Hawks, build no nest at all, laying the eggs on a bare rock, roof of a building, or some other equally exposed position. With Ducks, Grouse, Loons, etc., the structure is very crude, being scarcely more than a bunch of leaves, sticks, or reeds, a mere hollow to keep the eggs together during the period of incubation.

But many birds spend much time in building the nest and display great skill both in the work of construction and in its concealment. The dainty little cup of the Humming-bird, scarcely larger than a good-sized thimble, carefully saddled onto a limb and covered with lichens so skillfully as to resemble a knot so closely that only the keenest eyes can detect the difference, is a work of art that would quite baffle the deftest fingers. Vireos, too, are fine workers, building a symmetrical cup so strong and durable that it will sometimes withstand the storms and winds for several years before it is completely destroyed. These beautiful structures are lined with plant cotton, soft as down, making as dainty a resting place for the tiny fledglings as one can imagine.

It has always seemed to me that the Bank Swallows and Kingfishers are among the wisest of birds, so far as selecting a safe home site is concerned. They dig tunnels in a sand bank several feet in length, at the far end of which a chamber is excavated in which the nest is built. You will readily see what a safe place this is,

for prowling cat, squirrel or snake has little chance of entering. These birds may be classed as good engineers.

Eave Swallows are good masons. From the mud-puddle in the clay road they roll up little pellets which are placed one upon another like bricks, making a strong structure when the material is thoroughly dry. Sometimes a colony of a score or more build a sort of tenement house, but each dwelling has its own entrance. Barn Swallows use the same material, but usually place the nest on the beams or rafters of a barn, or other outbuilding of the farm, lining it with hens' feathers. Rarely one sees a nest of this Swallow on the outside of a building.

The Orioles are very skillful builders, weaving a fine, bag-shaped nest of strings, grass and tendrils, which they suspend from the end of some slender bough, usually of an elm tree, where it swings and sways in the summer breezes, its inmates quite safe from danger in all forms. Sparrows build substantial nests of rootlets, grasses, hair, wool, etc., on the ground, or in low bushes, as the case may be. Our old friend, the Robin, builds a rough but substantial nest of mud and straw, shaping it with her breast. Hawks, Owls and Crows build large nests of coarse sticks, usually in forest trees that are quite inaccessible. The Marsh Hawk, however, builds on the ground.

The nesting habits of birds change with varying conditions as to surroundings. Chimney Swifts and Tree Swallows formerly nested in hollow trees, but with the disappearance of the

forests, the former seek unused chimneys, while the latter will gladly accept the proffer of a bird-house. One of the little chalets under the eave of our house in the country has had a Tree Swallow as tenant for several years. The Song Sparrow, a ground-nesting bird, now and then builds in the tangle of woodbine that covers the end of our barn. Our constant friend, the Phœbe, formerly nested in caves, under sheltering ledges and banks, but now finds a desirable site for her well built nest under a bridge, in the barn cellar, or in an unused building.

The House Wren seeks very unusual nesting sites. A box is a favorite place, but an old shoe, an empty oil-can, or any hole or crevice large enough to receive the tiny structure will do. A friend told me of finding a House Wren's nest in the pocket of a carpenter's apron which had hung in the wood-house unused for several weeks. So much at home did the little sprite seem that my friend had not the heart to disturb her domestic arrangements, and the apron was not moved until the brood had left their quaint home.

A great deal could be written about the nesting of birds, but perhaps this will suffice to show how varied are their habits. No phase of bird study is more attractive, or more worthy of study. In nearly all States wise laws have been passed regarding the taking of birds' eggs, and they may be collected only for strictly scientific purposes. But most boys and girls today have learned that the eggs are most interesting when seen in the nest, and left to hatch

where the growth of the young may become a subject of daily enjoyment.

Call Notes. The utterances of birds consist of call notes and songs. All birds have the former, but all do not sing. Call notes are the language of the birds, by which very definite meanings are conveyed and clearly understood by one another. A great variety of emotions, love, fear, hatred, jealousy, sorrow, etc., are clearly expressed by them, if only we could understand. Watch a pair of Robins as a cat approaches their nest of fledglings and you will have little difficulty in reading the story of the tragedy from the emphatic utterances of the distracted parents. The tender cooing of a pair of Turtle Doves will leave little doubt in the mind of the listener as to their ability to express affection and endearment. The pleasant ripples and gurgles that come to my ear in the early morning from a box within a few feet of my chamber window, which is the home of a pair of Bluebirds, is good evidence to me of their ability to give expression to the feelings of great felicity and domestic happiness which pervade their home, even though my dull ears are not able to understand the details of their conversation. The Sentinel Crow, posted on some lofty lookout to guard the flock busily extracting the kernels of corn which the farmer has so carefully planted, conveys instantly a very definite message as to the immanence of the danger when the irate farmer appears, gun in hand. Equally intelligent to his fellows, though less alarming, is the signal he gives when you leisurely saunter

NORTHERN SHRIKE

toward the cornfield with no death-dealing weapon in sight; then your approach may be quite close before they withdraw.

When marauding Shrike or Hawk suddenly and on noiseless wing plunges into the midst of a flock of songsters, the cry of fear that goes up sends every defenceless bird in sight to cover instantly. There is no mistaking the signal and the response is immediate. Equally definite and vastly more pleasing is the happy conversation that goes on in a flock of Chickadees as they busily work away at their never-ending search for food on a bleak winter day. The fortitude and hardihood of these sturdy little birds quite excites one's admiration, and one easily concludes that their happy notes are really for the purpose of cheering and encouraging one another at their seemingly cheerless task. At any rate, they convey a lesson of cheerfulness and gratitude to us mortals which we cannot quite afford to overlook.

Song. To the great majority of people birds are most attractive in their vocal utterances, and one hears many songs when the singer is not seen. It is through their fine musical performances that birds appeal directly to the heart, and a careful study of the various species in this particular will bring the keenest enjoyment. Few experiences of my life have given me so much genuine pleasure as the study of bird song.

Each variety has its own utterances, but not all may be classified as music. Often there is a striking resemblance between the songs of the different members of a family. For example,

with the Thrushes, by all bird lovers declared to be the very prima donnas of the bird chorus, the songs of the various species differ greatly, and yet there is a quality of tone common to all their songs that is quite unmistakable when one has once become familiar with the notes of this family. The same is true of the Vireos, and perhaps the family resemblance is quite as striking.

In a given species the songs of individual birds will vary to a considerable degree. Mr. Burroughs tells me of a Song Sparrow that had in its repertory at least eight songs. A bird of this kind within hearing from our lawn this summer had a peculiar ending to his song that was unlike anything I have ever heard. But in general it may be said the similarity is close enough between members of the same variety to be easily identified when judged by the typical song. With some varieties the males alone sing; in others both sing with equal skill. Other varieties, as Cranes, Crows, Jays, Hawks, Ducks, Snipe, and most of the wading and water birds, have no song at all. Even that exquisite creature, the Cherrybird, has no song, its only note being a faint lisping "*seep seep*," not especially sweet or musical. The Swallows, except the Martin, can scarcely be classed as singers, yet their contented warbles make very pleasant sounds during the sultry summer days.

Bird song is almost endless in its variety. The "*sweet heart*" notes of the Chickadee, the tumbling torrent of the Bobolink as he hovers above the flower-strewn meadow, the measured

anthem of the Hermit, his evening hymn of praise, are good examples of the variety that one finds in Nature's chorus.

There is a charm attached to those bird songs heard in our younger years that is not replaced by others of later years, however excellent. The birds of our youth were the sweetest singers. It would be very difficult to convince a boy of a New England farm that the world holds any sweeter singer than the Bobolink or Hermit Thrush. The boy who passes his youth among the charms of a southern plantation would not believe it possible for any feathered singer to excel his own dear Mocking Bird and Cardinal, while our English cousins just as firmly believe that their wonderful Nightingale and Skylark represent the very acme of excellence in bird song. So it is not easy to say what and where are the best bird singers. Perhaps, after all, the song in our own hearts finding expression through these feathered minstrels is the one that most delights our ears.

Wise Nature has not placed all her choice singers in one country or in a single locality. Every land has its chorus of excellent performers, returning each year overflowing with love and joy which are given expression in this form. The only price of admission to Nature's chorus is an attentive ear, a listening heart. Perhaps if the price were expressed in dollars more would become patrons of the bird opera.

Bird Study. As we have seen, birds are to be found in practically all localities, if only one takes the trouble to look them up. The winter

is a very good time to begin the study of birds. Then the museum may be visited where one easily becomes familiar with the plumage of many varieties. Field work also may be profitably taken up at this time of the year when, because the varieties are few, one is less liable to become confused. Besides, experience gained at this time will be found of great value when the migration sets in and new arrivals are appearing almost daily, and sometimes several varieties in a single day.

To succeed in this study, first of all one should cultivate patience, and while in the field move quietly and deliberately, with eye and ear fully alert. An excellent way is to seek cover which birds frequent, sit down and remain quiet; then you will nearly always be rewarded by the appearance of some interesting bird. It is of much importance to learn the call notes and songs, for this will help greatly in the identification of various species. And, besides, you will hear many birds that you do not see, and really that you do not need to see, for you know them by their utterances when once their calls and songs are familiar. It adds much to the interest of bird study if notes are taken, especially of the dates of arrival in the spring of the different varieties. Interesting conclusions may be drawn from a series of such notes made through a period of several years. One greatly needs a pair of opera glasses, field glasses, or binoculars.

Classification. All birds may be broadly included in four general classes:

I, Permanent residents; II, Summer visitors; III, Winter residents; IV, Transient visitors.

In the first class are included: (*a*) All those birds that dwell the year round in the same locality, oftentimes never venturing far from their native woods or fields, as the Ruffed Grouse, Bob White, Owls, etc. (*b*) Those varieties which have representatives present in a given locality all the year, even though individuals move about over a range of several hundred miles. Such birds are Crows, Jays, Hairy and Downy Woodpeckers, Nuthatches, Chickadees, etc. While these birds are more or less given to a nomadic life, their wanderings are not extensive enough to be classed as migrations.

In the second class are found all that vast army which, with the return of spring, make their way up from their winter quarters south of us, select home sites and settle down in our midst to rear their broods during the months of spring and summer. These again make their way south in late summer or fall.

The third class includes those birds that rear their young and spend the greater part of the year to the north of us, coming down only when cold and deep snows render their food supply uncertain. Certain varieties, like the Snowy Owl, visit the United States only when the winter is extremely severe. It seems that under these conditions hunger drives them where the cold is less intense. With other varieties, as the Snow-bunting, Crossbills, Redpoll, Horned Lark, etc., the journey is a regular one.

The fourth class comprises those varieties that

pass by in the spring to nesting grounds somewhere to the northward, returning in the fall to spend the winter somewhere to the south of us. This class includes a large number of varieties which we can study only during the two or three weeks in the spring and a similar period in the fall when they are passing by.

This is, at best, but a relative classification, as it may be readily seen that birds pass from one class to another according to the locations where the observations are made. A bird which in New Jersey is classed as a transient visitor in Maine may be a summer resident; and a bird in Maine which is a permanent resident may be classed in Connecticut as a winter visitor. But it is well to consider these divisions in order that one may the better understand the subject of migration.

Chapter III

SPARROWS AND FINCHES

"He comes in March, when winds are strong,
And snow returns to hide the earth;
But still he warms his heart with mirth,
And waits for May. He lingers long
While flowers fade; and every day
Repeats his small, contented lay;
As if to say, we need not fear
The season's change, if love is here.
With 'sweet-sweet-sweet-very merry cheer.' "

— *The Song Sparrow*, Henry van Dyke.

This is a very numerous family, widely distributed over the earth's surface, having among its members many of our most common birds. As they are for the most part seed eaters, they are provided with round, strong bills, admirably adapted for crushing seedshells. And as they do not have to travel so far in migration in order to secure a food supply as the insect eaters, they are northern dwellers. In fact some of them, notably the Snowflake and Redpoll, winter where the weather is extremely cold and the snows deep.

Song Sparrow. This familiar songster is among our dearest friends of the bird world. Not only is he a constant singer during his long residence with us, but so trustful and fearless is he that he comes close about our homes, apparently fully aware of our love for him. The mere fact that he has been named the Song Sparrow

is indicative of the esteem in which his vocal efforts are held. And it should be remembered that he belongs to a family in which are many musicians of high rank. He is one of the heralds of the spring, his welcome notes being among the very first to announce the new order of things, the passing of the season of bare trees and bleak winds, the advent of soft breezes, warm sunshine, leafing trees and budding flowers. He arrives in the vicinity of New York early in March and stays till the end of November. Probably a few winter each year in that vicinity.

This Sparrow is in full song soon after his early arrival, and there are few more inspiring sights in all bird life than one of these little brown minstrels in the midst of a hard snowstorm, or a cold rain, pouring out his song of faith as though the sun were shining and his surroundings just to his liking. May there not be a valuable lesson for mortals in the courage and hardihood of this cheerful little singer?

The Song Sparrow is a plainly dressed but not unattractive bird. The back is a streaked grayish brown, with the crown brighter and a light line through its center, and over each eye. The under parts are grayish white with spots and streaks of dark brown centering in a large blotch on the breast. The dark spot and the peculiar pumping motion of the tail when in flight are two good field marks for knowing him. The colors of this species vary much in different localities. In Arizona he is very light; in Alaska quite dark, almost black, with intermediate stages between. This Sparrow is about six inches long.

They usually build on the ground a nest of grass, rootlets and strips of bark, lined with fine grass and hair. Sometimes the nest is placed in a low bush. For several years a pair has nested in the woodbine on our house, some ten feet above the ground. The eggs are white with dark brown spots. Song Sparrows have a wide range extending over the greater part of the United States. In the east they nest north of Virginia and winter from Massachusetts southward.

Chipping Sparrow. Another very common friend of lawn, garden and field is the Chipping Sparrow. He is a very dapper little fellow, clad in a neat suit of streaked brown above, light slate-gray beneath, with a pretty chestnut cap. He is often called the Hair Bird because the nest of grass in a bush or low tree is usually lined with horsehair. Last year a nest was brought to me made entirely of human hair which probably had been gathered around the back door of the farmhouse, a very dainty receptacle for the four or five tiny blue eggs which are thickly spotted with brown.

In the woodbine on our house they build every year, and we find them very attractive and happy neighbors. Their only song is a rapidly uttered "*chippy, chippy, chippy,*" running into a trill, not particularly musical and yet a unique and altogether pleasing performance. I have been watching for some time, with much interest, the mother caring for the young brood which left the nest more than two weeks ago. Their bodies are now full grown, but they are still bob-tailed, making rather odd-looking little

chaps as they follow their very hard-working mother about. She keeps up a constant quest for bugs, for the seed crop is not yet ready, and as soon as one is found she calls the nearest youngster to her and hurriedly places the bug in his opened bill. Then at once the search goes on and the performance is repeated. Truly the number of bugs these hungry creatures consume is nothing short of appalling, for the hunt is kept up from morn till night. This is the smallest of our common Sparrows. They range in summer to northern Canada, wintering in the Gulf States and Mexico.

Vesper Sparrow. This is a bird of the broad, open fields and roadsides where the thick, tall grass hides its ground-built nest. It never comes close about our house as do the Chippy and Song Sparrow, but it is as much a ground dweller as the latter, with which it is often confused both in its song and dress. Its clear, plaintive notes are not, however, so loud as the Song Sparrow's and are heard more often toward night when other birds have ceased to sing; hence its name. But during the day its song is also heard in the intervals between the bird's feedings, when it sings for several minutes at a time, repeating over and over its melodious strain. It is not easy to distinguish by words between the two songs, but a little study in the field where both birds dwell will make the difference clear to you; and one should associate the song with the singer to most enjoy it.

The dress of the Vesper is quite distinctive. The back is dusky brown, rather lighter than

the Song Sparrow. The light breast and sides are streaked with dark brown, with no blotch in the center. The outer tail feathers are white and show plainly when the bird springs up in front of you. This is the best field mark by which to identify the Grass-finch, or Baywinged Bunting, as it is less commonly called. The nest is similar to that of his cousin in material and location. The eggs are light, thickly spotted with brown. They come in early April, range in summer as far north as the St. Lawrence River and winter south of Virginia. It is about the same size as the Song Sparrow, slightly more than six inches in length.

Field Sparrow. The name of this sweet singer seems a misnomer, for I find him as a dweller in the bush-grown pastures and along the edge of the woods where the cedars grow, rather than in cultivated fields. He is shy and retiring, so that one needs a little patience to make intimate acquaintance with him. As you approach him, lured by his attractive strain, he retreats from bush to bush and will lead you some distance, striving to keep out of sight. The best method to adopt is to sit quietly near his nest and await his approach.

The Field Sparrow is gentle in his ways and attractive in dress, but as a singer you will most admire him. The song is clear, plaintive, sweet, "beginning with three soft, wild whistles and ending in a series of trills and quavers that slowly melt away into silence; a serene and restful strain, as soothing as a hymn." (*Blanchan.*)

In color this Sparrow shows more of the red-

dish brown than either of the preceding species. There is a gray line over the eye, the breast is light tinged with buff and has no markings. The long tail is reddish brown, and the bill is distinctly reddish, an excellent field mark.

Their range corresponds closely with that of the Vesper. They arrive in early April and stay till November. The nest of coarse grass, roots, etc., lined with fine grass and hair, is usually placed on the ground, sometimes in a low bank. The eggs, three to five in number, are whitish with brown spots.

Savanna Sparrow. Another very common summer resident in the upland fields, where his nest is well hidden by the thick growth of herds-grass and redtop, is the Savanna Sparrow. This is a small sparrow scarcely larger than the Chippy, but quite unlike in color, song and habit. When I cross the grass fields in June, every now and then this little fellow springs up almost at my feet, flies to the stone wall or a fence post, and after eyeing me for a moment slips away into the grass again. He displays a strange mixture of boldness and shyness.

The colors of the Savanna are brownish black heavily streaked with brown above; the breast is light with wedge-shaped marks of dark brown. The best field marks are the dashes of yellow over or in front of the eye and on the bend of the wing. Its colors are admirable for the protection of so constant a ground dweller. It is said that in the southern portion of their summer range they frequent bogs and salt marshes, usually in colonies, where they are much shyer than in their northern home.

The song of the Savanna is characteristic, so unlike that of any other Sparrow that once heard it will not be easily mistaken. It is weak, rather strident, insect-like, closely resembling in the opening notes the trill of a grasshopper. Mr. Chapman describes it as "*tsîp-tsîp-tsîp' sé-e-e s' r-r-r.*" This song is less musical than that of any other Sparrow I have heard except the Chippy, yet it is interesting for its peculiarities. It is heard at all times of day but is more frequent toward evening.

The nest is made of grass or moss and the four or five blue eggs are spotted with brown. The Savanna comes to us in late March or early April and stays till November, ranging from New Jersey to Labrador. They winter from Virginia southward to the Gulf of Mexico.

Grasshopper Sparrow. This Sparrow has a more southern range than the Savanna, rarely venturing north of central New England. It is usually found in old, dry, abandoned fields where weeds abound. Its ground-dwelling habits and weak notes render it a very inconspicuous bird, easily overlooked if one is not aware of its presence in a certain locality. Its song, as the name suggests, is strikingly like the chirp of a grasshopper, to which it is commonly likened. The notes resemble the trill of the Chippy and. are suggested by the syllables "*tut tut,' zee-e-e-e-e-e-e-e,*" thin and wiry, audible for a short distance only, unless one is specially listening for them.

The dress of the Grasshopper Sparrow is quite distinctive. The upper parts are reddish brown streaked with ash-gray. The crown is

blackish with a buff line through the center. The line over the eye, lesser wing coverts and shoulders are yellow. The whitish, unstreaked breast and the gray outer tail feathers are marks which easily distinguish it from the Savanna, which is about the same in length, both being slightly shorter than the Song Sparrow. Grasshopper Sparrows arrive in late April, range as far north as central New England, and winter from North Carolina to Cuba. The nest of grass is on the ground. The four or five eggs are pure white with spots and flecks of reddish brown.

Sharp-tailed Sparrow. This is a common summer visitor along the seashore from South Carolina to New Hampshire. It inhabits tidewater marshes overgrown with sedge-grass and weeds, is rather shy and has a poor song. They usually dwell in colonies. Dr. Dwight describes its song as "*tu-se-e-e-oop*," a wheezy and unpleasant strain.

The upper parts are olive-gray in color, with a brownish tinge on the crown, which has a blue-gray line through the center. The cheeks are buff and there is a line of the same color over the eye. The breast and sides are buff streaked with black. The bend of the wing is yellow. The feathers of the tail are sharply pointed; hence the name. It builds among the tussocks a nest of coarse grass lined with fine grass. The eggs are whitish, thickly spotted with brown. These sparrows arrive in their summer range in early May and stay till September. They are slightly smaller than the Song Sparrow.

Fox Sparrow. Not far behind the Robin,

Bluebird and Song Sparrow that first tell us spring has come, there arrives a bird in a bright cinnamon brown suit so red that he is called the Fox Sparrow. This name applies only to his color, for he possesses none of the sly traits usually attributed to Reynard. Rather is he a bold and trustful bird, decidedly social in his habits, for during migration we almost always find them in good-sized flocks of Juncos and White-throated Sparrows. In the open country I often find them in bush ricks along the old walls, in alder runs, or along the banks of the streams. In the city parks I find them in thick shrubbery under a sheltering hill where the bleak winds do not reach. Often in the early spring you will hear a rustling in the dead leaves so loud that you are almost convinced that a flock of hens is at work. They scratch with both feet at once, a most effective process, judging from the way they make the leaves fly. They are searching for grubs and insects, and are pretty constantly at work during the two or three weeks they are with us.

As singers they rank very high, but it is not often that we are favored with their full song, which is reserved until their arrival on the nesting ground far to the north. I have been so fortunate as to hear them sing in Prospect Park, Brooklyn, a rich, deep, well rounded carol, eloquent of the joy of life.

When returning in the late fall, they are silent, except for the call note, a rather low and lisping "*tchip*," which becomes louder and more emphatic when the bird is alarmed. They linger

about the parks of New York City until the end of November, but with the snowfall they move south to Virginia, or farther. Their summer range is north of the United States, probably as far as northern Labrador.

The Fox Sparrow is an inch longer than the Song Sparrow, and thicker set. Its coat is a handsome reddish brown above, light gray heavily streaked with dark brown and black underneath. They are said to build on the ground or in low bushes a nest of coarse grass lined with fine grass, hair, feathers, etc. The eggs are light blue speckled with brown.

Swamp Sparrow. In late March or early April there comes to the reed-bordered brook which winds through the meadow, or to the swampy pasture land with its thicket of alder and fir, a Sparrow not often seen about the homes of men, except during the migration season. It is aptly named the Swamp Sparrow, for it is a denizen of those waste places of nature.

If you invade his home, he will fly from bush to bush, uttering a faint little song which sounds like "*weet-weet-weet-t-t-t-t*" running into a trill. It is not a pretentious song, you will say, and is rather monotonous, yet it seems quite in keeping with the surroundings.

He is somewhat smaller than the Song Sparrow, and has a cap of bright chestnut, a black forehead, and a grayish line over the eye. The back is striped with various shades of brown and black, so that the general color is darker than that of the Song Sparrow; the wings and tail are reddish brown and the under parts are gray.

SWAMP SPARROW

The nest is built on the ground in some sheltered nook, perhaps under a low bank, on a tussock of grass roots, and is sometimes arched over. They range from Illinois and Pennsylvania north to Hudson Bay, wintering from Massachusetts southward. In winter I have found them with large flocks of other Sparrows among the sedge grass and broom in the sand barrens of North Carolina.

The White-throated Sparrow. It seems inevitable that one who spends much time studying Nature's feathered host should develop special fondness for some particular varieties. I confess to great admiration, not to say affection, for the White-throated Sparrow, and no summer seems quite complete that has not yielded me opportunity for close association with this sweet wilderness singer.

In the early days of April I search eagerly for them in the city parks, and often I am rewarded by a snatch of their delicious melody. But it is only a suggestion of their full, rich song which I hear in July in the spruce woods of northern Maine. Here they seem the very embodiment of earthly bliss and their notes are heard at all hours of the day and night, for it seems so brimming is their cup of joy that it may not be fully expressed during the hours of daylight, and they sing at intervals throughout the night.

As the song of the White-throat easily lends itself to verbal rendering, much local sentiment is expressed in its interpretation. In Massachusetts where formerly it was said one must be a Peabody or a nobody, the bird is believed to

sing "*Old Sam, Peabody, Peabody, Peabody.*" In Maine where the jackknife is supposed to be the constant companion of every man, it says "*All-day, whittling, whittling, whittling.*" In Canada the song takes on a patriotic rendering, for every loyal inhabitant is sure it sings, clearly enough, "*Oh sweet, Canada, Canada, Canada.*" There are many other interpretations, so that one may exercise a wide range in his choice of words to fit the music of the White-throat. But you may be quite sure, if you are so fortunate as to hear its full nesting song, you will not be disappointed.

These Sparrows are among the few fall singers, so they are doubly welcome when they again return to us as they journey south. Sometimes on October mornings we find them in the shrubbery in the backyard of our city home; and it has happened that in reply to a whistled imitation of their song they have favored us with a bit of fascinating melody. They linger about during the autumn days till winter is close at hand, then move along southward. Sometimes a few winter in the vicinity of New York City and even, it is said, as far north as Massachusetts, but the great majority winter south of Virginia.

The usual call note of the White-throat is a lisping "*tchip*," but, when alarmed, he utters a very emphatic "*chink*," with a metallic ring that has led to its being called the "quarry" note. Like Fox Sparrows, they scratch with both feet at once among the dead leaves, a rather ludicrous performance. They are about

Courtesy of the National Association of Audubon Societies

WHITE-THROATED SPARROW

seven inches long and rather stout. Their dress is attractive. On the head are two black and three white stripes. At the ends of the stripes over the eye and at the bend of the wing there is a dash of yellow. The upper parts are streaked brownish and there are two distinct white wing bars, and a square patch of white at the throat which gives the bird its name. The under parts are plain gray. They breed in woodland regions of northern New England, north to Labrador. The nest of coarse grass, fine roots, strips of bark, etc., is on the ground or in low bushes. The four or five eggs are white, speckled with brown.

White-crowned Sparrow. This is another fine large Sparrow, one we would much like to have linger with us through the months of summer; for not only has he a handsome suit but report has it that in his nesting grounds far to the north he is a singer of much merit. The few notes I have heard during migration, in cadence and intonation are quite like the closing strain of the White-throat, sweet and clear, suggestive of a delicious song were the bird in mood to do his best.

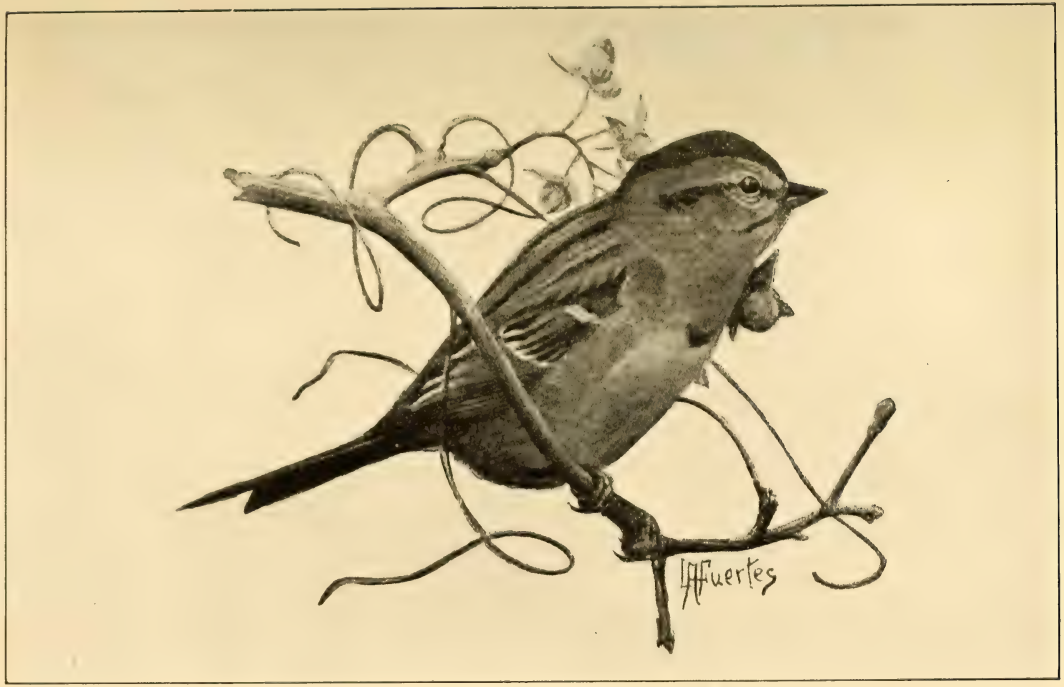
In dress the White-crowned is the most beautiful of all the Sparrows. The head has three distinct black and four white stripes, and the throat and breast are a beautiful gray without the white patch. The back and rump are a rich grayish brown, the tail darker. There is no yellow about the eye or on the wing.

They are gentle and refined in manner and the low call note, *chip*, is rather lisping and good-natured when the bird is not alarmed. They

appear during late April or early May, and stay about for a few days in much the same localities frequented by the Fox Sparrows and White-throats, then leisurely journey along, never seeming to be in a hurry. They do not nest in the eastern United States, except perhaps in a few cases on the higher mountains, but journey to Labrador and northern Canada. We see them again in October for two or three weeks, then on they pass to winter in the South.

Tree Sparrow. The Sparrows we have studied thus far are summer visitors, birds that help to make joyous the season of warm sunshine and flowers. Now we are to consider briefly a winter visitor whose coming cheers our cold winter season, when even the glimpse of a feathered friend is a rare but welcome sight. This is the Tree Sparrow, or Winter Chippy as he is called because he visits us during the season of frost and snow. Like his namesake of the summer, he wears a pretty chestnut cap, but he is considerably larger, about the size of the Song Sparrow. He does not have the neat, trim look of the Chippy, but is rather rough and fluffy in appearance, perhaps because he wears a much warmer suit to protect him from the chill winds and terrible cold of the long nights. He is a very hardy little fellow, else he would perish from such exposure.

The back of this Sparrow is brown with dark streaks and the dark wings have two distinct white wing-bars. The cheeks and throat are gray. Perhaps the best field mark is the dark spot in the center of the ashy-gray breast.



TREE SPARROW

When the sun shines they will be found about the old fields and pastures where last year's stalks of goldenrod, wild aster and various weeds show above the snow. Here they busily feed, two or three clinging to the same stalk in the most amiable and cheerful manner, uttering little notes of conversation, not in the least alarmed at your presence. Feeding over, away they fly to a near-by tree, and you may be so fortunate as to hear their sprightly song "*too-la-it, too-la-it,*" gentle and cheerful, telling of contented and happy lives. Then away they go to the thicket where they spend the night, cozily tucked away in the thick top of friendly spruce or fir.

In late autumn when the rear guard of the summer army is disappearing beyond the horizon, the Tree Sparrows come down to us from their breeding range in far-away Labrador; they stay with us during the months of snow and disappear to the northward just as the vanguard of the migrant army appears from the South. How grateful we should be that we are never without birds to cheer and interest us!

Purple Finch. Close behind Robin, Bluebird and Song Sparrow, those outposts of the bird army that regularly invades the North with the return of spring, come a large number of hardy migrants. Some of these winter so far north that they may be classed among our permanent residents, for there is no time of year when representatives of their species are not found in the Northern States. Prominent among them is the Purple Finch, a most attractive bird

in plumage and song, one whose acquaintance should be made as early as possible. They usually travel in small bands, often in the company of Goldfinches and Sparrows. Their presence in flight is made known to you by a queer little squeak, low and sibilant, a sound that has been said to suggest that their wing-joints need oiling.

In April, Purple Finches are found in low bush ricks, by the walls, along the brookside and in the orchard, where I fear they sometimes pluck the swelling fruit buds. Let us hope that if this knowledge comes to the ear of the farmer, he will kindly accept in payment their happy presence and delightful warble; for it would seem a great pity for him to intercept the career of such brilliant members of the bird choir.

As a singer this bird is placed near the head of the Sparrow-Finch family, no mean honor. In fact Mr. Matthews says he has no equal when his method, which is that of a warbler, is considered. His strain is much more pretentious than that of the warbling Vireo. The song is full, rich, varied and prolonged. When I find them nesting in the north woods in midsummer they often add two or three notes I do not hear in the open country to the south. Would it not be very interesting to know the cause of this? We first hear his song with the approach of the mating season, in late April, and he is rather a steady performer throughout the summer. When I find Purple Finches in the South in winter, stuffing themselves with poke berries,

they are silent, with the exception of now and then a call note.

Purple Finches seem to have a wide range in nesting sites. In a thick-topped maple in a neighbor's dooryard they have nested for many years. They also nest in the spruces and firs of the northern wilderness, and sometimes in evergreens standing alone in the pasture. The nest is usually a dozen feet or more from the ground. The male is very attentive to his mate, feeding her as she sits on the eggs, sometimes even taking her place for a time. When the young are reared they roam the country in flocks, wintering from the Northern States southward to the Gulf. Their winter range changes somewhat according to the severity of the weather.

The name Purple Finch is a misnomer, for there is not a purple feather on him. The males two years old and over are strawberry red on the head, neck, throat, breast and back, shading into brown on the wings, tail and rump. The young males and females are streaked brown, much like Sparrows, but may be distinguished by the rounded bill, the bristle-like feathers around the nostrils and the forked tail. They are the length of the Song Sparrow, but rather slender in appearance.

Junco. Another bird that is both a migrant and permanent resident in the Northern States is the Junco or Slate-colored Snowbird. They are always in flocks except during the nesting season, for they are the most social as they are the most common winter birds. Yet many of

them move southward in the late fall and I find them very numerous in the pine lands of the Carolinas.

Juncos are confiding and trustful in manner, fearlessly coming to the lawn, even to the veranda, if perchance you invite them with crumbs from your table. They are very trim in their neat suits of slate color above and on the throat, with a light breast which gives the appearance of a low-cut white vest. The female has a wash of brown on the upper parts; otherwise her dress is the same. The bill is flesh color, looking much like a wooden peg stuck into the round head.

When you come upon a flock of Juncos, sometimes before you are aware of their presence, you will be greeted by a most emphatic "*smack smack*" which tells plainly of their irritation at being disturbed. This ill humor, however, soon passes and you will hear a rapidly uttered "*chew chew chew*," a pleasing sound expressive of content. As the mating season comes on, often just as they are leaving for the northern nesting grounds, you may hear a dainty trill, low, clear and quite musical. Their summer range is from the Northern States northward.

I once found in a northern forest a Junco's nest built of fine black rootlets, lined with snow-white hair, plucked, I thought, from a deer's tail. This made a dainty place for the five little white, brown-speckled eggs. Mr. Burroughs once showed me where a pair of Juncos had built in the side of a haymow in an old barn, less than ten feet from the chair where he

sat at his literary labors several hours a day. It was interesting to note that although the nest was built entirely of dead grass, the material was gathered from the roadsides rather than from the abundance of the haymow.

Chewink. A bird you will often find in early April scratching in the dry leaves in the parks is the Chewink, or Towhee, as he is called. These names almost exactly represent his call notes as he flies up to a low bush, "*chewink, chewink, towhee, towhee,*" notes rather metallic in tone but not at all unpleasant. As he spends most of his time on the ground, he is also called the Ground Robin. He is usually found in second growth tracts and bush-grown pastures, but always, as I have observed, near the ground. The Chewink is a bird of good temper, as his notes indicate, vivacious and rather winsome in his ways. He is not a pretentious singer, but during the season of mating and nesting the male sings a strain somewhat limited in range but clear and pleasing, which has been written thus: "*Chuck-burr, pill-a-will-a-will-a-will.*"

In dress the Chewink is a distinguished bird. His black upper parts, throat and breast, bright chestnut-red sides, white belly, and dashes of white here and there form an unusual combination of colors which renders him quite conspicuous in the leafless woods of April. With the female the black is replaced with lightish brown, the chestnut-red is much lighter and the tail umber. The iris of the eye is red.

The nest of the Chewink, on the ground or near it, is of dry leaves, grass and plant fibre,

lined with finer grass. The eggs, four or five in number, are white, evenly speckled with fine brown spots. They range in summer as far north as Maine and the Province of Ontario and winter from Virginia south.

American Goldfinch. This little courtier in black and gold is a very attractive member of the bird chorus both in dress and song. Tiny sprite that he is, he has the hardihood to brave the rigors of our northern climate, for I sometimes find him in central Maine in the coldest winter weather. At that time of year he has doffed his gay clothes and put on a sober suit of olive-brown much like that worn by his mate throughout the year. But when the mating season approaches again he changes for his bright colors which he wears till the young are reared.

This is a bird of many names, of which Wild Canary, Yellowbird and Thistlebird are the most common, the last because in the fall the thistle is his favorite food. In summer he is a frequent visitor to the garden because of his great liking for grubs found on the beets. Often I see him perched on the bean-poles proclaiming his happiness with a swinging "*che-e-p*" followed by his rambling, jovial song so full of glee and exuberance that one may easily believe him the happiest creature in existence. Then as he takes wing in long gallops, you will hear "*per-chick-o-ree, per-chick-o-ree*" long after he has disappeared from sight.

The Goldfinch is, all in all, in disposition, dress and song, one of our most attractive bird

CHEWINK

friends. His whole bearing is refined and gentle. The male in summer dress wears a black cap and wings, otherwise he is bright yellow except for a dash of white on the wings and tail. In winter the yellow is replaced by olive-gray similar to the all-the-year dress of the female. The summer range extends from the Carolinas to Labrador. They roam in winter from the Northern States to the Gulf. They build a very artistic nest of fine grasses, bits of bark, hair and mosses, lined with thistledown, in bushes and trees at some distance from the ground. The tiny eggs are pale blue. They nest later than most birds, often not until summer is well advanced.

Rose-breasted Grosbeak. Among the Finches are several birds with bills so large that they have been aptly named Grosbeaks, that is, great-bills. Of these, the most common summer visitor as well as the most brilliant in dress and song is the Rose-breasted Grosbeak, named from the triangular patch of beautiful rose-red on his breast.

I find them in the shrubbery of the less frequented parks of New York City in mid-May, and when I reach Maine, in late June, they are nesting in second-growth woods and occasionally in the orchard. One can but feel that this beautiful bird should be more common, and perhaps he would be but for the pursuit of the feather hunters who have found it profitable to slay him because some ladies believed his poor body made a pretty ornament for their hats. Happily most of the States have passed laws

forbidding the killing of our song birds; and I am greatly pleased to note that where in my boyhood I never saw this bird in our valley, now he is a common summer resident. He is a special friend to the farmer, as a favorite food with him is the potato beetle.

It is not easy to say which is more pleasing, his dress or his song. His notes have often been compared to those of the Robin, but the similarity is but superficial. The Grosbeak's song is much finer, pure and clear, a gladsome, ringing melody. Gibson spoke of it as "suffused with color like a luscious tropical fruit rendered into sound." To me it is one of the most appealing of the woodland songs, one that always arrests my steps instantly when the first notes reach my ears.

The dress of the male is black above, with rump, outer tail quills and two spots on the wing, white. The breast and under wing coverts are rose-red, the bill white. When in flight the white wings marks are very conspicuous. The female is so unlike in color as to be quite unrecognizable, except for her form and size. Her general color is sparrow-like brown with sulphur yellow under the wings. She has no rose-red on the breast and her bill is brown.

They nest from Virginia to Maine and winter in Central and South America. The nest, loosely made of twigs, rootlets and plant fibre, is placed in bushes or trees from five to twenty feet above the ground. The light green eggs are marked with brown. This Grosbeak is more than eight inches long and rather thick-set.

Pine Grosbeak. Among the visitors that come down from the frozen north during the winter season is a large and beautiful bird, the Pine Grosbeak, or Pine Bullfinch, as it is sometimes called. On these excursions they are rather shy and keep closely to cover, but when found in summer in the coniferous forests of the north, they are fearless and friendly. I have stood where I could almost reach them without disturbing them in the least, as they fed on spruce cones, the handsome plumage of the male making a striking picture seen against the background of deep green. They also feed upon pine cones. They are large birds, almost as long as the Robin and much stouter. The short, thick bill has a slight hook at the end, a useful implement for cone-tearing.

The color of the male is olive-gray with rich Indian-red on the head and neck, reaching well down upon the body. The wings and tail are marked with streaks of black, white and slate. The females and young males have, in general, yellowish green where the male is red. The under parts are gray with a tinge of yellow under the tail. In winter they range irregularly in flocks through the Northern States, rarely reaching the vicinity of New York City. On these wanderings they feed upon berries of the sumac and mountain ash. They nest in the far north in coniferous trees. They are said to have a delightful song which I have not had the good fortune to hear, for I have found them strangely silent.

Another beautiful bird of this family is the

Blue Grosbeak which ranges over the Southern States, rarely venturing north of Virginia. This is also a good singer. The Evening Grosbeak is an inhabitant of the northern central portion of Canada. Yellow and black are the prevailing colors in their plumage. As singers they do not rank high. Sometimes they make very unexpected excursions to the Atlantic States in midwinter or early spring, but only at rare intervals. One would be much favored by fortune were he to meet a flock of these very rare visitors.

Indigo Bunting. This little Finch is one of the birds that to know is to love, for it is both beautiful in dress and elegant in manner. As so often happens, the species derives its name from the color of the male, and is just what you would suggest because of the rich blue of his coat. Except for the black wings which are margined with blue, his suit is deep blue, lustrous and luminous when seen in the sunshine. But you would never recognize his little mate, so wholly different is her dress, a grayish-brown, sparrow-like suit with just a faint tinge of his dominant color.

Like Sparrows, Indigo Buntings feed largely on the seeds of plants and grains. When they arrive in early May they are in song and continue to sing throughout the summer, even during the heat of noon when most birds are silent. The song is a happy, tinkling little warble which lessens toward the end as though the singer were wearied by the effort. It seems devoid of sentiment and does not strike one as being particularly melodious.

These are birds of the roadside and pasture, common in summer throughout the Eastern States. I have found them much more numerous in the valleys of the Willowemoc and Neversink in the Catskills than in Maine. They winter in Central America. The nest of dead leaves, grass and plant fibre is placed in the fork of a bush or limb of a tree near the ground. The eggs are bluish white. In size the Indigo Bunting is a trifle smaller than the Song Sparrow.

"Their coats are dappled white and brown
Like fields in winter weather,
But on the azure sky they float
Like snowflakes knit together."

Thus sang Mr. Burroughs of the Snow Bunting or Snowflake, as it is so fittingly named, a visitor that is always associated with snowdrifts and winter weather. Down out of the cheerless sky they swing, lighting in the weed patches that still show above the drifts where they feed as merrily as though this were their choice of temperature. In fact one easily believes they have a real aversion to warmth, for no sooner is the breath of spring felt than away they go to their summer haunts in the far north, well up in the Arctic regions where they nest on the ground.

This is distinctly a bird of the open country and rarely does one see them in a tree except at night or during a severe storm, when they seek shelter in the woods. They are ground dwellers, where they are well protected by their coloring. As they run about on the snow some

seem quite dark, others almost white, so much does their appearance change in the varying conditions of light. When in flight they are almost invisible against the sunlit sky. They are the lightest colored of the Sparrow family. The summer plumage, which we do not see, is even lighter than the winter suits. Then they are mostly white except for the black wings, tail and a band across the back. The winter plumage shows considerable brown. The bill and feet are black.

Their notes, heard often in flight, are soft, rippling, and quite pleasant to hear when bird song is so rare. They appear in late fall, always in flocks, journeying sometimes as far south as New York City.

Pine Siskin. Another winter visitor so erratic in its wanderings that you are never sure of finding him two seasons in the same locality, is the Pine Siskin, or Pine Finch. I often see them in flocks in Prospect Park during the late fall. In notes, size, color and manner, they closely resemble their cousins the Goldfinches. When I first made their acquaintance in the wilderness of northern Maine several years ago, I was quite puzzled for some time. But by careful investigation I found that while their general coloring is much like the winter dress of the Goldfinch, on the wings and tail there is a dash of yellow; and while their call notes are similar, the Siskin has an interrogative *wee*, and several harsh notes that the Goldfinch does not have. They build in evergreen trees in the woods, a nest of moss and fine twigs far above

the ground. They range in summer from the extreme north of the United States northward. In the winter they journey irregularly southward to the Southern States.

Redpoll. This cheery little winter visitor comes to us in flocks soon after the cold weather sets in. As with the Siskins, you are never sure of finding them in the same locality for two seasons. They have no fixed winter habitat, but like so many of the seed-eaters, are habitual wanderers. They are rather shy little chaps, but sometimes will visit your garden in search of food. I sometimes find them in Prospect Park in November and December. They fly high in large flocks, and their presence is first known to you by a faint *chip, chip,* which grows louder as they come whirling down out of the sky, moving in perfect harmony. Thoreau's description of them is so beautiful it is well worth quoting: "Erelong amid the cold and powdery snow, as it were a fruit of the season, will come twittering a flock of delicate, crimson-tinged birds, lesser Redpolls to sport and feed on the buds just ripe for them on the sunny side of the woods, shaking down the powdery snow there in their cheerful feeding, as if it were high midsummer to them." With the warm spring rays they, too, set out for the north, but just as they leave sometimes we hear a snatch of song like that of a Canary, a sweet and melodious carol.

The male wears a bright red cap. His back is dark brown streaked with gray. The throat is black, the rump and breast pink. The female has the same general coloring, without the pink.

These birds are about five and one-half inches in length.

Crossbill. When you first see the Crossbill you are quite sure he is deformed, so peculiar is the appearance of the bill. But when you see the bird feeding upon the cones of spruce, pine or hemlock, the seeds of which constitute their food, you are quite convinced that this bill is the most perfect instrument that could be devised for the use to which they put it. No other distinguishing mark is needed than the warped bill, the mandibles of which cross when closed.

Red-winged Crossbill. This is a permanent resident in the most Northern States, a winter visitor farther south, but very erratic in his wanderings. When feeding, they climb about like little parrots, which they resemble somewhat in form, color and movements. They are usually in flocks, except when nesting, and when in flight utter a sharp cheeping note. They nest early and consequently their young are full grown when other birds are still incubating. Last year, in August, I saw them in large flocks, young and old, among the evergreens at Pemaquid, on the coast of Maine. They were singing a pleasing warble slightly suggestive of the Purple Finch, but a much less meritorious performance.

The general color of the male is Indian-red, lighter on the rump. The wings and tail are brownish. The female has dull olive-green where the male is red, with darker shades on the head and neck. The under parts are light. They breed from the Northern States north-

ward, sometimes on mountains farther south. The nest of twigs and moss is usually placed in an evergreen tree at considerable distance from the ground. They are slightly more than six inches in length.

Cardinal. The cardinal, or Virginia Red Bird, is a great favorite throughout his habitat; and ever since making his acquaintance I have felt that I should much enjoy him as a neighbor. Only now and then do they stray as far north as New England and are not common birds about New York, although at times they nest in the parks there. From northern New Jersey southward, they are permanent residents whose presence makes glad the heart of every bird-lover. It is not easy to imagine a person so blind to Nature's choice gifts in color of plumage and gentle manner that he would not become at once an ardent admirer and a consistent defender of this beautiful bird. In James Lane Allen's story, "The Kentucky Cardinal," is found a description so pathetic and altogether delightful that it has won many friends for this brilliant creature that has too often fallen a victim to its own beauty. The feather hunter has no sentiment.

The plumage of the male Cardinal is a rich red color with black at the throat and about the base of the red bill. The wings are washed with gray, the feet are brown, and there is a prominent crest. The female has a much duller red and there is brown in her dress, but she is easily recognizedas the mate of the "Red Bird." Both birds are singers and their vocal efforts are

greatly admired. The notes of the male are a full loud whistle, which has been indicated by the syllables "*cheo-cheo-chehoo-cheo.*" The song of the female is softer and quite different, yet possessing the same quality. The call note of both is a sharp "*tsip.*" Years ago, one April day after a late snowfall in a Virginia town, I heard the Red Bird singing from a treetop, the branches of which were heavy with snow. The bright color of the bird in contrast to the pure white, together with his glad song, made an impression I have never forgotten.

The Cardinal is rather a bird of the hedgerows, garden and tangles of wild vines than of the woods. He moves about somewhat clumsily, with tail held high, showing little evidence of the irritation that arises from a bad temper, such as is displayed by many birds, especially the House Wren. The bulky nest of leaves, bark, grass, etc., is placed in a bush or low tree. The light gray eggs are marked with brown spots. The male Cardinal is a model husband and father, bestowing upon his family the most solicitous and constant care. Altogether he is one of the most lovable of our feathered creatures. They are rather more than eight inches in length.

Chapter IV

FLYCATCHERS

"I quit the search, and sat me down
Beside the brook irresolute,
And watched a little bird in suit
Of sober olive, soft and brown.

. . . . .

'Dear bird,' I said, 'what is thy name?'
And thrice the mournful answer came,
So faint and far, and yet so near,—
'Pe-wee! pe-wee! pe-wee!' "

—*The Pewee*, Trowbridge.

The Flycatcher family receives its name from the common habit among its members of catching various insects upon which they feed exclusively. As their food supply is cut off by cold weather, except the Phœbe, they winter below the frost belt and are rather late arrivals. There are some thirty varieties throughout the United States, seven or eight of which are common in the Eastern States. They bear strong family resemblance in color and form, as well as in feeding habits. They are not good singers, only one variety, the Wood Pewee, having notes that could be classed as musical.

Phoebe. This bird has another common name, Pewee, or Bridge Pewee, from its liking of an old bridge as a nesting place. Phœbe is a good example of the influence of amiable ways in making friends; although neither specially

attractive as a singer nor brilliant in dress, yet they are always welcome as neighbors and we are happier for their presence about the old bridge, the farmyard and the orchard. Their plaintive notes, "*phœbe, phœbe,*" are rather monotonous, yet they are not unmusical and are quite pleasing in early spring when songsters are all too few.

Phœbe is the first of the Flycatchers to arrive, since they winter farther north than any other member of the family. Last year at the end of December I found them in the pinelands of North Carolina, mostly solitary, but one pair in the shelter of a sunlit roof of a deserted house were in song, uttering loud notes that were quite strange to my ears although this bird has been familiar to me in its nesting range from boyhood. It is said the Phœbe mates for life. If this be true it is hard to understand why they do not make their migratory journeys together; or how he finds his mate, since the males arrive a week or two ahead of the females. They become strongly attached to a desirable building site returning year after year.

This year, when our country home was opened in late May, a Phœbe's nest was found on a window cap near the kitchen door under the roof of the veranda. It was well built of mud, moss and grass, lined with bits of wool and feathers. Although so near the door where there was much passing, Phœbe was not afraid, but hatched and reared a brood of five youngsters who were guided to the orchard as soon as they could fly. There they are learning bird ways,

and we still hear, in late July, her gentle "*phœbe*," which somehow is always strongly suggestive to me of the springtime.

A favorite nesting place is a barn cellar or under a bridge. The old covered structure, now fast disappearing, was an ideal place, but the girders of the modern structure of steel seem to answer every purpose; so perhaps Phœbe is not such a creature of sentiment after all. Formerly caves and sheltering banks were their nest sites, but they have quickly taken advantage of the better locations about the homes of man.

Phœbe is very plainly dressed. The upper parts are brownish olive; the wings, tail and crown darker. Some feathers of the tail are edged with white, and underneath the feathers are dingy white with a yellowish tinge. The bill is straight and black. A good field mark is the constant lifting of the tail when the bird is perched. This Flycatcher is about an inch shorter than the Kingbird. They breed from South Carolina to Newfoundland, wintering from North Carolina southward

KINGBIRD. A very familiar Flycatcher, so common that he is known to everybody who gives the slightest attention to the birds, is the Kingbird, or Tyrant Flycatcher, so called from a popular notion that he is something of a bully and tyrant. After close study of his habits for many years, I have concluded that his reputation is well founded. His bristling nature manifests itself in his attitude toward small defenceless birds as toward the larger marauders who may be a menace to his household. He is a very

jealous guardian of the neighborhood and, when Crow or Hawk ventures near, this valiant little warrior fearlessly plunges at the enemy, fiercely striking him on the back again and again, and sometimes, it seems, clinging fast with feet and bill to the luckless culprit who cries with pain. No amount of turning or twisting will shake him off until he is ready to quit. But should the Crow or Hawk light, then the situation is changed at once and Mr. Kingbird keeps well out of range of the stout bill. His purpose accomplished, back he comes with a rattling cry of victory and settles on some conspicuous perch, on the lookout for passing insects. When one is sighted, and his keen eyes see it far off, out he swings, snaps up with a click of his bill the defenceless creature, and rattles back to his perch to repeat the performance over and over.

With all his show of bravery, however, I fear the Kingbird at heart is an arrant coward, for he always attacks in the rear, and the moment his victim, however small, turns on him, he retreats precipitately. But they are lively and interesting neighbors, welcome to the farmer because of their valiant show against Hawks.

The Kingbird is common about the farm and orchard and in general in the open country wherever there are trees. I always find them nesting in elms that hang well out over the stream, sometimes only a few feet above the water. The circular nest is made of sticks, strings, wool, grass, moss, etc., lined with feathers and plant down. The four or five white eggs are thickly spotted with sepia brown.

KINGBIRD

They are rather solitary in their habits at all seasons of the year. With all his belligerent nature toward other birds he is a model husband, for he treats his mate with great tenderness and affection. He relieves her at intervals during the period of incubation, and assists her in the care of the fledglings. Perhaps it is because of his great love for his family that he guards them so jealously.

The Kingbird is the best dressed of the Flycatchers, a family wearing only plain colors. The upper parts are ashy-gray with the head black. The under parts are white, grayish on the breast, and the tail feathers are tipped with white. The male has an orange patch on the crown that is seen only when the crest is raised. The notes of the Kingbird are harsh and unmusical. Their strident rattles are heard at all hours of the day during their residence. They arrive in late April or early May, summer throughout the Eastern States and New Brunswick, and winter in Central and South America. They are nearly nine inches in length.

Chebec. The smallest of the Flycatchers as well as the most numerous, is the Chebec, or Least Flycatcher, as he is sometimes called. His shrill metallic cry, "*chebec, chebec,*" is rather disagreeable, and when heard constantly becomes the most wearisome cry of the summer sojourners. They live in alder bushes along the bank of the river, in the orchard and in the edge of second-growth lots that border pastures. Perched on some good lookout, this little fellow, with jerk of head and tail, repeats his shrill cry,

then darts out for passing fly which his keen eye sees at some distance. Then back he flits and resumes his perch with a low chuckle of satisfaction and takes up the same tiresome "*chebec, chebec.*" He is about the only bird I dislike for a summer neighbor. We are very grateful that the English Sparrow has not become numerous in our neighborhood.

Chebec excels as a builder. In the fork of an apple-tree limb, back of our house, he constructs a dainty cup of rootlets and strips of bark, lining it with hair and plant down. The eggs are plain white.

The dress of this little Flycatcher is rather pretty. The back is olive-green, the breast gray, and the under parts whitish. The head is darker and the wings have two distinct white bars. They nest from Pennsylvania to Quebec and winter in the tropics, arriving in early May. This is a very small bird, about five inches in length.

Wood Pewee. Whenever, in summer, I plunge into the second growth woods just beyond the cove, I am greeted by a plaintive little song that contains more sentiment, more real pathos than any other melody of the bird chorus. Slow and pensive it sounds, morning, noon and night, from early May to the end of August, "*pe-a-wee, pe-a-wee,*" a sweet, though rather melancholy, strain. 'Tis the song of the Wood Pewee, the best singer of the Flycatcher family. It is a wandering sound not easily located, and often one will search long before finding the singer. This song has pleased many

ears and inspired many a tribute in prose and verse. Mr. Matthews says of it: "It is to be classed along with Stephen Foster's 'Old Folks at Home,' or the famous Irish melody, 'The Last Rose of Summer.'"

This sweet singer is the plainest of birds in dress. The male is dark olive-brown with a darker shade on the head and tail and there are two faint wing bars of white. The white under parts are washed with olive-gray on the throat and breast. The dress of the female is similar, but the under parts are tinged with yellow.

Like other members of the family, the Wood Pewee is an excellent builder. Sometimes the colors of the nest blend so perfectly with the moss and lichens of the tree in which it is placed as to render it practically invisible. One summer I moored my boat many times directly under a Wood Pewee's nest so skillfully hidden in a hollow of an old yellow birch that I did not discover it until the young had flown and the autumn winds were tearing it to pieces; and it was not more than two feet above my head. It was rather a shallow nest, built of fine grass, moss and rootlets, skillfully covered with pale green lichens the exact color of the bark of the old tree. The eggs are white with brown markings, some of them quite indistinct.

This bird ranges in summer from Florida to Newfoundland and winters in Central America. They are among the last of the Flycatchers to arrive, usually appearing about New York in early May. They are six and one-half inches in length and the wings are longer than the tail.

Crested Flycatcher. Yesterday I climbed Hedgehog Hill for the first time in many years, following the old cow-paths so often trod in my boyhood. This was our favorite berrying ground whither we went many times each summer to gather pailfuls of the luscious blueberries and raspberries which grew on the southern and western slopes. But now the old pasture is overgrown with sapling pine; and the crest of the hill, then heavily forested, is stripped bare, the white ledges gleaming under the summer sun. As I sat looking out over the broad valley of the Androscoggin there came to my ears a shrill note of interrogation, "*pee-ups, pee-ups,*" which I instantly recognized, so characteristic is it, although I had not heard it for many months, as the call note of the Crested Flycatcher. Very soon I located him on the topmost limb of a dead white birch, his prominent crest plainly seen with the naked eye. Through the glasses I got his colors, greenish-olive above with brown washings on the head, chestnut on the tail, and two distinct wing bars; the under parts are sulphur-yellow, except the throat and breast which are ashy-gray. This, our largest Flycatcher, is more than nine inches long. It is a wood-living bird, seldom seen about farms. He, too, is a tyrant, given to bullying all comers in his vicinity, as one would judge from the bristling appearance of his crest when he sights you. It is said a pair of them will often drive a Downy or Hairy Woodpecker from the cozy retreat which has been laboriously excavated as a home for the brood, and settle down for the

season with as much complacency as though they were owners of the premises.

The Crested Flycatcher has the curious habit of hanging a snake skin or something resembling it outside the nest, probably to scare away all intruders. This habit has led to much speculating among ornithologists as to its origin and purpose. Mr. Burroughs says he has found onion peel and shad scales in the nest, perhaps the best substitute for the snake skin they did not find. They range from Florida to Canada in summer, and winter south of Florida. They arrive about New York in the early part of May.

Yellow-bellied Flycatcher. A little Flycatcher I often see in Forest Park, New York City, during the migration in mid-May, is the Yellow-bellied Flycatcher, a name by which you will quickly know him, for he is more distinctly yellow underneath than any other small variety of this family. He stays for a short time only, then moves along to his summer home in the evergreen forests of northern Maine and Canada. When seen in migration they are silent but in their nesting haunts they sing a song that has been compared to the House Wren's deeper notes. It also has a softly whistled, plaintive call note, "*chu-e-e-p*" with a rising inflection. It builds on the ground in deep forests a nest of moss lined with fine rootlets. The four or five eggs are creamy white, spotted with brown. It is a trifle longer than Chebec. The color above is the regulation olive-green, with wings and tail brownish. The

under parts are sulphur-yellow, somewhat washed on the sides with olive-green. Their stay is short, scarcely more than three months, and the end of August sees them journeying southward again.

Olive-sided Flycatcher. Another Flycatcher that is known only as a transient visitor in the Middle States, but as a summer resident in Massachusetts and other Northern States, is the Olive-sided Flycatcher. These birds arrive in the vicinity of New York City toward the end of May, and are seen on some tall tree, on the lookout, as ever, for passing insects. They pass along quickly to the nesting ground among the dark forests of the North where they arrive soon after June 1. These Flycatchers construct in a tall evergreen tree a beautiful nest of moss lined with fine rootlets and covered with green lichens, so closely resembling a knot that from the ground it is almost impossible to distinguish it. The eggs vary in number from two to four and are very beautiful, a creamy white spotted with brown and purple.

The notes of the Olive-sided are plaintive, "*pu pu, pu pu, pu pip,*" oft repeated as they sit on some lofty lookout which commands a good view of the immediate landscape. They appear like the Kingbird in temper, jealously darting at any bird, large or small, that comes within the limits of their domains. The plumage is olive-brown above, with clove-brown on the wings and tail; the throat, middle of belly and line in center of breast are whitish. There is a tuft of yellowish-white feathers on either flank,

OLIVE-SIDED FLYCATCHER

a very good field mark. The upper mandible of the bill is black, the lower yellow. This bird is about seven and one-half inches in length.

When in the West Branch country this year, one day I heard the loud "*pu-pip, pu-pip*" of this Flycatcher from the stump lot just behind my cabin. On going out, I saw a parent bird with four full-grown young in the top of a dead tree, evidently on the lookout for food. Very soon the old bird disappeared from the field of my glasses, but quickly returned with an enormous dragon-fly which was passed over without ceremony to the gaping bill of a hungry youngster. For a moment he seemed not to know what to do, but soon rapped its head sharply on the limb, gradually gathered in the stiff wings and, quicker than I can tell, swallowed it with a gulp. It seemed that this would be rather a bristly morsel, but, no doubt, they well know their capabilities in that direction. I find this the most numerous Flycatcher in the deeper woods of Maine.

Alder Flycatcher. (Also known as Traill's Flycatcher.) This little bird has its summer home in the ricks and tangles of alders that grow along the brooks and small rivers, and in pasture swamps in New England and New Brunswick. It also ranges over the West, even to Alaska.

After the end of May you will find him perched on the top of a low alder bush where he keeps a close watch for his day's rations, which he gathers up with all the vigor characteristic of his family. The notes oftenest heard are a rasp-

ing "*eaze-we-up*," and a rather sharp "*pep, pep*" when you approach.

This is rather a brownish Flycatcher. The upper parts are olive-brown with ashy-gray on the wing coverts; the under parts are white with grayish on the breast and yellowish on the belly; the throat is white. The upper mandible is white; lower, whitish. The nest placed in a low bush, two or three feet above the ground, is made of grass and plant fibre, lined with fine grasses and plant down. The eggs are creamy white with brown markings. It is about the size of the Song Sparrow.

Chapter V

SWALLOWS

"And the gossip of swallows through all the sky."
—Bryant.

So sociable in their habits and so fearless and friendly toward man are the Swallows, they are among our best loved birds. The members of no other family come quite so close about us, for some Swallows even seek the shelter of barns and outbuildings for their home sites, while others inhabit the houses and boxes erected for their occupancy by the loving hand of man. They, too, are expert flycatchers, but their habits are quite different from those of the family we have just studied. Being provided with long, slender wings, they are among our strongest and most graceful fliers. They spend most of the hours of daylight on the wing, picking up the flies and gnats of the air. So much time do they spend in flight that their feet are undeveloped, so small and weak that they are not good walkers. Barn Swallows, stumbling about on the grass, remind one of clumsy infants just taking their first steps. This family is not especially noted as singers, yet their happy warbles bring much cheer, making them very welcome neighbors during the long summer days.

Barn Swallows. The Barn Swallow, in pose and flight, is a very graceful bird, and its plumage, while not brilliant, is beautiful. There is little difference between the male and female in coloring, and there is slight change during the season, except, perhaps, for added sheen on his coat during the mating and nesting season. The upper parts are steel-blue, the forehead, throat and breast a fine chestnut. The outer feathers of the tail are dark, spotted with white. The tail is deeply forked, giving rise to the expression, "swallow-tail."

In and out among the rafters and beams of the barn they flit many times a day, their busy twitterings, very pleasant sounds, not worthy perhaps to be dignified with the name of song, but suggestive of happy, peaceful lives, content with simple ways, rather than aspiring to places of prominence in the bird opera. Gentle and peaceful as they are under ordinary conditions, when you climb to their nests on the rafters or beams, they fly about in great distress, even darting at your head, voicing in very emphatic tones their disapproval of your intrusion.

I often think the Barn Swallow is blessed with a strong sense of humor. When the feeding for a time is over, if they sight puss prowling about the dooryard, a rallying cry will bring a goodly number of these skillful navigators of the air, and the sport is on. Straight at her they dart almost within striking distance of her cruel paw, then sheer off with a chuckle at her disappointment. Again and again the operation is repeated,

sometimes for an hour or more, till, quite distracted, puss withdraws to seek easier game. Now and then when they venture a bit too close, she is able to strike one, and alas! our inhabitants of the barn are one less. Only a few times, however, have I witnessed this outcome to their teasing.

The nest of this Swallow is built of clay and lined with feathers. The eggs are white with rather large spots of brown. They range in summer as far north as Greenland and winter in South America. They arrive in the vicinity of New York City the latter part of April. The length of this bird is about seven inches.

Eave Swallow. Another dweller about the farm buildings is the Eave Swallow, and he also takes his name from his nest-building habit. Not in the old barn, but under its wide eaves, they build their clay houses.

When the May showers make mud-puddles in the road, this little mason becomes very busy, rolling up pellets of clay and transporting them to his nest site. As they usually build in colonies, often of a dozen or more pairs, the scene is an animated one, for the work must be hurried while the material is ready. Our neighbor's barn has had a colony of eave dwellers for many years and they have been the source of much amusement to the many observers.

Frequently there are as many as twenty of these tenements in one cluster; again not more than four or five; sometimes a solitary nest is built. These nests are rather fragile and need constant repair. Now and then the whole

structure falls, destroying eggs, fledglings and all, and the poor birds seem quite distracted. But in a few days they go bravely about the work of repair and the season's labors go on as though no untoward accident had befallen them.

It is a curious sight when the tenement is completed to see the mistress of each apartment sitting in the circular entrance at evening chattering and gossiping, but ever alert to drive away any who presume to invade the privacy of her home. The query is often raised, are the houses numbered? How else could they tell their own? When the first settlers came to America, these birds built on cliffs and were known as Cliff Swallows. In the West they still follow this habit.

The notes of the Eave Swallow, little more than wheezy squeaks, are less attractive than those of the Barn Swallow. They strongly resemble their cousins in dress, but the tail is less deeply forked. They are easily told by the brownish ring about the neck and by the crescent-shaped frontlet "shining like a new moon." These Swallows are slightly shorter than Barn Swallows. They nest from New Jersey as far north as Labrador, and in the interior even to the Arctic Ocean, wintering in the tropics. We may expect to see them around New York City late in April.

Tree Swallow. You may also have this Swallow for a dooryard companion in summer, if you will offer him a cozy tenement in the shape of an attractive bird box. They are less gregarious than other members of this family,

yet sometimes several pairs nest in the same general locality. In the forest they inhabit old Woodpecker holes and hollow trees. On the farm a hollow fence-rail or a hole in an apple tree makes a suitable nest site.

A pair of these happy birds for several seasons has occupied one of our bird houses set on the little shelf where the eave finish breaks around the corner. Both birds assist in building, and it seems to me they carry into the little structure much more material than they need, sometimes filling it so full of coarse grass and straw that they enter with difficulty. The nest is made very soft with feathers, a safe receptacle for the four or five white eggs. They are easily distinguished from other Swallows by their pure white breasts. The upper parts are steel-blue or steel-green, darker on the wings and tail. The tail is only slightly forked. Their coats are glossy, glistening like silk in the sunshine, making them, we think, very attractive ornaments about the premises.

They are the first Swallows to arrive in the spring and among the first to leave in August. Since they feed exclusively on insects at this season, they are almost constantly on the wing, now skimming low over the water, now whirling over the land in graceful circles, gathering their food as they go.

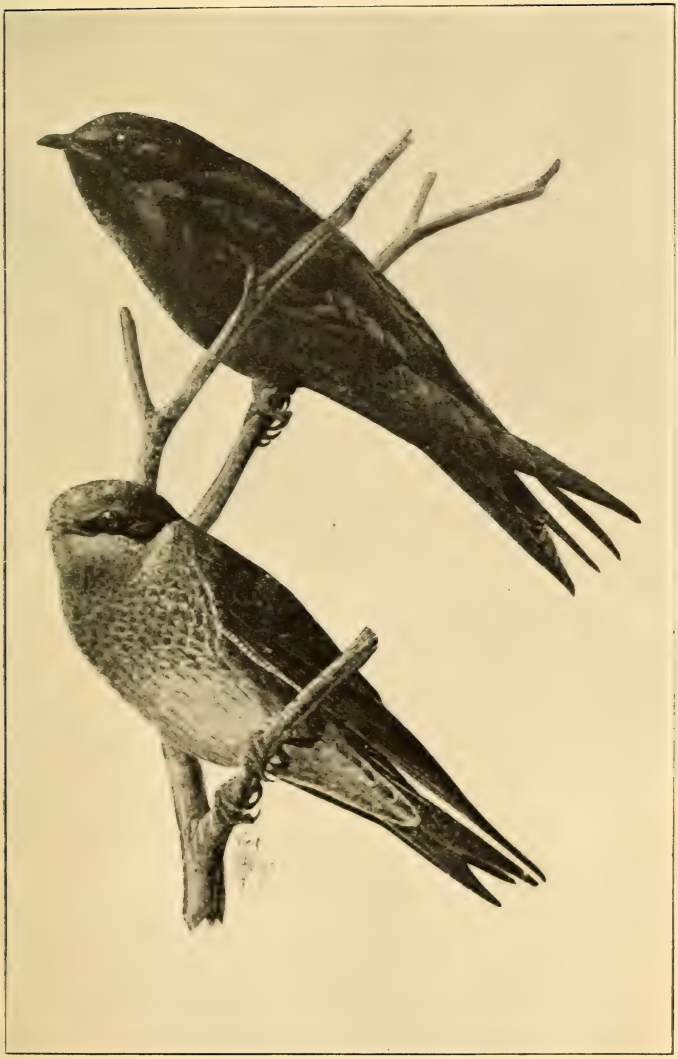
When the young are grown these swallows gather in flocks and haunt the marshes and streams where insect life is most plentiful. They disappear to the southward by the latter part of August, and winter in the far tropics. Their

notes are limited to a happy chuckle, a sort of family greeting, which I most often hear as the parent bird arrives at the nest with food. They also have a low call note of alarm, but are, on the whole, the most silent of our Swallows. They are scarcely six inches long, an inch shorter than the Barn Swallow.

Bank Swallow. The Bank Swallow also is named for its nesting habits. This bird is an engineer, a digger of tunnels, at the far end of which is a secure location for its eggs and brood. Along the sandy river banks and where excavations have been made by man, this Swallow digs with its tiny feet a tunnel three or four feet long. At the end a chamber is excavated in which a nest is loosely made of grass and coarse straw, softened with feathers gathered from the farmyard. The eggs are pure white.

Sometimes when you are walking along the edge of a bank you will hear a strange muffled sound coming from beneath your feet, and with a whir of wings, out will dart, from their dark cells, the frightened birds to inquire into the character of the disturbance. Whirling about, they angrily chatter for some time, but, on your departure, settle back to their home cares again.

Their notes, which have been described as a "giggling twitter," are less pleasing than those of the other members of the family. As they are decidedly gregarious, we see these Swallows, too, in great flocks after the young are grown, often in the company of Barn and Eave Swallows. They also frequent the streams, gliding about like their cousins in search of food.



PURPLE MARTIN

This is the smallest of our Swallows, scarcely more than five inches in length. Unlike their relatives, the plumage is dull, having no sheen or brilliancy. The best distinguishing marks are the dusky breast and white throat; the upper parts are brownish gray. Their summer range is practically all of North America. They winter as far south as Brazil and are among our April arrivals.

Purple Martin. The largest of all our Swallows is the Purple Martin, or House Martin, as he is often called, because, like the Tree Swallow, he, too, will gladly accept the proffer of a tenement in the shape of a neatly painted house. But he insists that it be set firmly at the end of a stout pole, tall enough to discourage all efforts of the house cat, which seems to have a special fondness for the flesh of this fine bird.

These Swallows are among our most attractive bird neighbors, being rollicking, jovial fellows, always good-natured, if one can judge from their frequent conversations. Whether on the wing or sitting on their comfortable porches, they seem to carry on almost constant communication in tones that indicate easy-going, amiable natures. Their notes are like liquid laughter. There are few birds more attractive to me, especially in the morning, even though they disturb my sleep with their entertaining talk. They have neither sweet song nor bright-colored plumage, but their constant good humor, friendly manner and commendable domestic traits make them most welcome tenants.

One of the few occasions when this disciple of

peace shows signs of bad temper is when at the end of the long journey from his winter haunts in the tropics he finds his home in possession of a squad of noisy English Sparrows. Then there is immediately trouble in camp. If the fur doesn't fly, it is because there is none in the dress of the saucy intruders. As a rule, a very short combat ends the affair and the Sparrows seek other homes. The Martins, their battle won, proceed to pitch out of doors whatever they find, nest eggs, or young, it matters not. Then, in clean quarters, they leisurely build nests of straw lined with feathers, and lay the six to eight pure white eggs. It is needless to say the members of the farmer's household always fully sympathize with the Martins. Sometimes Bank Swallows, being earlier on the ground, pre-empt the quarters of the Martins, and then a family quarrel is started which usually results in a victory for the larger birds.

So far as I am able to learn, the Martins at present nest wholly in receptacles provided by man. In the South, believing Martins help to safeguard the chickens against attack from hawks, the negroes suspend hollow gourds from the end of tall poles.

This Swallow is eight inches long. The male has shiny blue-black plumage above and below, the wings and tail being slightly duller. With the female the upper parts are dull black, the under parts brownish gray, the feathers somewhat tipped with white. They range north to Newfoundland in summer and winter in Central and South America.

Chapter VI

OUR BEST SINGERS

Thrushes—Including the Robin and Bluebird

"Who sings New England's Angelus?
A little bird so plainly dressed
With robe of brown and spotted vest,
He rings New England's Angelus."
—Nelly Hart Woodworth.

It is generally believed by bird lovers that the Thrushes as a family are our very best singers. In both quality of tone and power of expression they are the recognized leaders of the bird choir. They are a large family, distributed throughout the greater part of the world. We have about a dozen varieties in the United States of which five may be classed as common birds in the Eastern States, either as regular summer denizens, or as transient visitors.

The distribution of Thrushes in summer is a very interesting example of Nature's wisdom, for she does not gather all of her most attractive creatures in a single locality. The most southern in range is the Wood Thrush; the Veery overlaps his zone and extends into the territory occupied by the Hermit. This rare singer reaches into the haunts of the Olive-backed;

and still farther north is the Gray-cheeked, which advances in its most northern range well toward the Arctic regions. The Bicknell, I believe, nests only in the Appalachian Mountains, rarely below three thousand feet elevation. Of course these zones are not to be absolutely defined, but they will give an excellent general idea of the location in summer of the various species. As a family, Thrushes are clad in sober brown suits, plain and unpretentious, but not unattractive. Perhaps Dame Nature did not think it wise to dress such excellent vocalists in brilliant colors.

Wood Thrush. Although one naturally thinks from its name that this is a forest-dwelling bird, yet it is very common about the city parks and gardens, even about the hedges and shrubbery of the lawn. In fact its name is quite a misnomer, another illustration of naming a bird for what it is not, rather than for what it is. No other member of this family is seen so much in the open, or so close about our homes.

This is in dress the most strikingly marked of our Thrushes. The upper parts are cinnamon-brown, brightest on the crown. The white under parts are marked with large, round black spots on the breast and sides, with finer spots running from the bill to the marks on the breast. It sometimes raises the feathers of the crown when excited, giving the appearance of a crest. It is the largest of our Thrushes, nearly eight and one-half inches in length.

The Wood Thrush is distinctly a bird of elegance and grace in pose and movement, and

Courtesy of the National Association of Audubon Societies

WOOD THRUSH

its disposition is what one expects in a bird of such vocal ability; for in some way we have come to associate musical talents of high order with amiability of temper. When disturbed, particularly during the nesting season, it utters a sharp quick alarm note, "*pit, pit,*" which gives evidence of its anxiety for the fledglings. It also has, at intervals, a series of "*chucks*" and "*tuts*" which it runs together as an interlude to its song. Many believe the Wood Thrush is excelled only by the Hermit. Its notes are pure and limpid, the opening strain, calm and peaceful, has often been interpreted by the words, "Come to me." Heard at evening, when all nature is at peace, it is a soulful and uplifting strain. It ranges over the Eastern States, breeding as far north as northern New England.

The Wood Thrush is a rare bird in Maine, but in the thick deciduous forest surrounding the Pleasant River camps, some five miles from Katahdin Iron Works, each season for several years I found a colony of them nesting. For some time I was puzzled at their presence so far north and was inclined to believe them a variety with which I was not familiar, but after much careful study and comparison I am convinced they are Wood Thrushes. In the little camp I occupy in sound of the rippling stream, their notes, soothing and delicious, are heard till the twilight has gone; and again in early morning with the first gleam of the approaching day they pipe their melodious lays. The presence of these birds in the woods far north of their accustomed haunts has been the source of so much pleasure

to me that I am held by them for a day or two each year. I also hear this Thrush in June in the wooded parks of New York City, where they arrive in the latter part of April. The nest of the Wood Thrush is made of mud, dead leaves, twigs and grass, lined with fine rootlets. It is usually placed in a bush or tree several feet above the ground. The eggs are light blue like the Robin's.

Hermit Thrush. The earliest comer of the Thrushes is the Hermit, and he is the last to leave in the fall. In the very first days of April he appears in the city parks of New York, passing on in a week or ten days to his nesting ground north of the latitude of central New England. At this season he is silent, giving no hint of the wonderful vocal power he exhibits when settled down in his summer range.

The Hermit's dress, olive-brown above, shading to brighter brown on the tail, is duller than that of the Wood Thrush. The breast and throat tinged with buff, have rather faint wedge-shaped marks of brown running into lines on the sides. The best field mark is the bright brown tail, as this is the only Thrush to have the tail brighter than the back. When perched, the Hermit at intervals slowly lifts its tail, a habit followed by no other Thrush.

For its song, the Hermit is the most admired of all northern birds. Perhaps the Mocking Bird is as much admired in the South, but probably an unprejudiced judge would say that in tone and execution the Hermit is unexcelled. Mr. Matthews pronounces him "the most talented

and brilliant melodist in the world, the Nightingale not excepted."

There is a quality in this song that appeals directly to one's spiritual nature. It is limpid, serene, uplifting, impossible to express in words. Many have tried to convey some adequate idea of its wonderful quality, but all, to my mind, have failed. To be appreciated at its full, it should be heard in its proper setting, the gloom of the thick woods, as the afternoon shadows are lengthening. Then you will often hear an alternating duet, as it were, ringing back and forth between these sweet singers, the very soul of tuneful melody.

There could scarcely be imagined a greater contrast in song and habit than exists between this "Swamp Angel," as he is well named, and that minstrel of the meadow, the rollicking Bobolink. The latter is distinctly a creature of the sunshine and flower-strewn fields where, during the long days of June, he pours forth his bubbling, tinkling torrent of song which charms and delights us with its very ecstasy. The life of the Hermit, on the contrary, is secluded and seemingly much less joyous. Like the Anchorite of old, he seeks the silence and gloom of the evergreen forest where he chants his hymn of praise, a divine melody. I count myself very fortunate that my boyhood was passed where this wonderful wood-singer loved to dwell, and my heart is filled with gratitude toward the Giver of all good gifts for that great privilege.

The Hermit builds on the ground, usually in the woods, a nest of moss, coarse grass and

leaves, lined with fine rootlets, pine needles, etc. Last year I found two nests outside the woods, one in a low bank by the roadside and only a few feet from the wheeltrack; the other in a tuft of coarse grass in a pasture, but in both cases only a short distance from the edge of thick woods. The four or five eggs are pale green or light blue in color. The Hermit continues to sing well toward the end of August, when most birds are silent.

The Wilson Thrush, or Veery. In the thick underbrush of low swampy lands, in tangles on the banks of streams and ponds, and in thick shrubbery in the parks, you will hear in May the song of the Veery, another celebrated member of this talented group. Some writers have placed this Thrush even above the Hermit as a singer, but for myself I have never been able to put so high an estimate on his performance. He, too, is a regular summer resident about our homestead, but he has never aroused or inspired me as has his distinguished cousin. It seems very probable that on my part there is some lack of appreciation of a bird that has inspired from the pen of Dr. Van Dyke this beautiful tribute:

"The moonbeams over Arno's Vale in silver flood were pouring,
When first I heard the Nightingale a long-lost love deploring.
So passionate, so full of pain, it sounded strange and eerie;
I longed to hear a simpler strain,—the wood-notes of the Veery.

"But far away and far away, the tawny Thrush is singing;
New England woods, at close of day, with that clear chant are ringing;
And when my light of life is low, and heart and flesh are weary,
I fain would hear before I go, the wood-notes of the Veery."

The Veery is a shy bird inclined to keep well within the cover of its nesting haunts. The most satisfactory way to make his acquaintance is to invade his thicket and sit still until he appears. Only rarely do I see him cross the river from the thick second growth where he nests to the bush-grown bank where he feeds for a time on the black worms that are destroying the leaves of the alders. This is usually a ground-dwelling bird, rarely seen in tall trees. On the ground, or near it, is the nest of leaves and twigs, lined with fine rootlets. The eggs are plain greenish blue.

The call note of the Veery is a clear whistle, "*whe-eu*" or "*whoit.*" The song has been described as a "sylvan mystery, reflecting the sweetness and wildness of the forest, a vocal will-o-the-wisp." Mr. Chapman calls it a "weird monotone of blended alto and soprano notes." Mr. Burroughs describes it thus: "The soft mellow flute of the Veery fills a place in the chorus of the woods that the song of the Vesper Sparrow fills in the chorus of the fields. It has the Nightingale's habit of singing in the twilight of a June day, and when fifty rods distant, you will hear their soft reverberating notes rising from a dozen throats. It is one of the simplest strains to be heard, as simple as the curve in form, delighting from the pure element of harmony and beauty it contains."

As I hear the Veery on the river bank at night, its tones seem much like those of the jew's harp; nearer, this song is more reedy and melodious. It sounds much like the word v-e-e-r-y

rolled over and over in a series of intertwining circles.

The upper parts of this bird are a nearly uniform cinnamon-brown, duller than the color of the Wood Thrush. The under parts are white, except the breast which is tinged with buff, faintly marked with spots of brown. It is slightly smaller than the Wood Thrush. Their nesting range is from New Jersey to Newfoundland. They also spend the summer in the Allegheny Mountains as far south as North Carolina. They winter in the tropics, as do all this family.

The Olive-backed Thrush. (Swainson's Thrush.) This Thrush, when seen in its northern migration, is usually silent and will not be found unless one looks carefully for it. They are in small bands that keep to cover, appearing about New York in the middle of May. They are to be seen for a few days only, then pass along to summer homes in the evergreen woods of the North. I hear them singing in the middle heights of the Catskills in late May, and again in the spruce woods of northern Maine later in the year I find them in abundance. There they are the most common Thrush; the Hermit is rarely heard and only occasionally the Veery, but the Olive-backed sings in every spruce thicket.

In migration they have several call notes, "*chick*," "*pit*," "*peep*," but in the nesting grounds, when I invade their dark domain, I hear only a sharp "*puck, puck.*" They are good singers, in tone quality somewhat resembling

the Hermit, but are not so leisurely and serene. When I first heard these Thrushes I was quite puzzled, for I thought they must be young Hermits. A little experience, however, soon taught me to distinguish, and never since have I been troubled. Their songs are heard at intervals throughout the day, but toward night their efforts are almost continuous. Their opening notes are brilliant, and one is led to expect a splendid performance, only to be disappointed with the closing strain.

The upper part of this Thrush's dress is a uniform olive, rather dull in effect. The throat and breast are cream buff, the sides of the throat and breast having wedge-shaped spots of dark brown. The eye ring is buff. They usually build in evergreen trees, eight to ten feet above the ground, a compact, cup-shaped nest of twigs, grass, leaves, moss, etc., lined with fine roots and moss. The eggs are four or five in number, greenish blue in color, spotted with cinnamon-brown. They range in summer from northern New England and New York to Labrador.

Gray-cheeked Thrush. This bird is comparatively a stranger to the majority of bird students. Only during migration are we allowed even a glimpse, and that is only for those who look closely; for they often travel in company with the Olive-backed, which they so closely resemble in color as to be almost impossible to identify, unless one has both in his hands. Their numbers at best are not large. They are shy, and when found are pretty sure to get

quickly out of eye range. This Thrush breeds far north of the United States, well up toward the Arctic, hence is known as the Arctic Thrush, and also as Alice's Thrush. In song and habits they are believed to resemble the following species.

Bicknell's Thrush. This Thrush seeks the upper heights of mountains in New York State and New England. It is seldom found, except during migration, at an altitude less than three thousand feet. It is much like the Gray-cheeked in color, but the general effect of its plumage is brighter; it is also a somewhat smaller bird. Of its song Mr. Brewster says: "The song is exceedingly like that of the Veery, having the same ringing, flute-like quality, but it is more interrupted and ends differently, the next to the last note dropping a half tone and the final one rising abruptly and having a sharp emphasis." I found this thrush on the wooded slopes of Mt. Katahdin at an elevation of approximately four thousand feet. But it was late in August, the nesting season was over and the song period as well. They were shy and restless, keeping well hidden in the thick evergreens.

Robin. To this famous family belongs our old friend the Robin, for a Thrush he is, as you will readily prove to your entire satisfaction if you will make a careful study of his song. It is not an easy matter in a limited space to do justice to this great friend of man, for a volume could be written about him, his friendliness, conversation, nesting habits, song and travels. While there is much we already know about this

vigorous songster, there is much more we do not know. How long do they live? Where do those particular birds winter that were raised in *your* dooryard, or in your shade trees? Do the same birds really come back to you and nest in the same spot year after year? Do they retain the same mate? What do they say to each other in all the varied conversations they carry on? These and many other interesting queries about this common bird remain to be answered by bird students. Is this not an interesting field for investigation?

Robin is perhaps the most common bird about the homes of men. In the shade trees and parks of the city, about the village streets, in the dooryard of the farmhouse, in field and pasture, along the bushy banks of the river, in second growth, in fact nearly everywhere in the open, rarely in the dense forests, this sturdy householder is found during the nesting season. But in the fall after the last brood is well grown, they flock and often retire to the woods and less frequented localities where they become shy and rather restless wanderers.

While the nest is always the same rough structure of mud and grass, the nesting site varies according to circumstances. In city streets and parks it is placed on a limb often thirty or forty feet high. About the farm it may be in a low bush or tree, only a few feet above the ground; or perchance, under the roof of the porch, or over a window cap. In fact it may be found in any convenient location, regardless of its exposed position, for the bird has very little idea of con-

cealment. On the shelf at the corner of the eave of our house, close against the wall of the little chalet which is usually occupied by Tree Swallows, a pair of Robins nested for three years in succession, each year building the new nest over the old, the structure finally reaching three stories in height.

Robins rear two or three broods each year, sometimes in the same nest, often in a new one at some distance from the first. This year when we arrived at our country home as usual we at once looked up our bird friends. We found Phœbe under the roof of the porch, Chippy and Song Sparrow in the vines, Tree Swallow in the little green house, but no Robin in his accustomed place on the grillework under the veranda. They were seen, however, pulling worms about the lawn, and a little watching located the nest on the river bank some forty rods away. In early July, as a home site for their second brood, to our great delight they moved into a low elm right across the road in front of the lawn. A nest was soon built and they settled down to their domestic affairs with all the appearance of that deep satisfaction which these birds exhibit during nesting time. Early one morning a little later we heard a great outcry from them and on going out found they had disappeared. The nest showed signs of a struggle, being awry and somewhat torn. Two eggs were in it, but it was abandoned, and our regret and disappointment were great. A pair of Shrikes were seen sneaking about the grounds and the crime was laid at their door by the members of our

household, but I am not at all sure they were guilty. The tragedies of the nests are many. The wonder is that birds are able to maintain their numbers at all in the face of so many dangers.

The Robin is one of the very first comers in the spring, while there are still many snowbanks about and the winds are chill. I look for them in Prospect Park in the early days of March. At first they are obliged to feed on last year's fruits and berries, for usually the frost is not out of the ground so early and, in consequence, the supply of earthworms is not yet available. Often they frequent the orchard for the pulp of the apples left from last year's crop, now rendered soft by the winter's freezing. For a few weeks, until the angleworms are ready, their food problem is a hard one. Then all their troubles are over, and the greening lawns are dotted here and there with these vigorous birds.

No doubt a few Robins winter as far north as Massachusetts in sheltered places where berries may be had during the cold months. But the great majority migrate in flocks to the south, Georgia and Florida being favorite winter haunts. There they roam about in search of food which is not always available for so many birds, even in those regions of abundance. In the winter of 1911-1912 it was said many died of starvation. Mr. Burroughs, in that year, spent several weeks on a Georgia plantation and returning north, told me of finding many dead Robins, perished, as he believed, from lack of food. One day, finding one weak and apparently

sick, he took it to the house and dug worms for it. It eagerly devoured the first handful, even a second, and flew away evidently fully recovered. He concluded from this that many were in a starving condition.

A few weeks before they begin their northward flight in late January or February, they often gather in enormous flocks, a real Robin convention, sometimes spreading over several square miles of territory. No doubt there are hundreds of thousands of birds in one of these gatherings, the purpose of which is all a mystery to us. After a period of fraternizing, the flock breaks up into small bands, and the migration is on. When they arrive on their nesting grounds they are either alone or in small flocks.

As a conversationalist the Robin takes high rank. No bird so emphatically expresses the varying emotions, and his emphatic alarm notes when danger approaches are recognized by all the birds in hearing. He is the watchman for his neighbors of the open, as the Blue Jay is for the forest-dwellers. The song of the Robin, clear and bold, and audible at a long distance, is rather hurried and nervous, entirely lacking the serenity of several of his cousins. But the "rain song," his best utterance, is a very interesting performance, varying much with individuals. It has been interpreted thus:

"I hear the Robins in the lane
Singing cheerily,
Cheer up, cheer up,
Cheerily, cheerily, cheer up."

The Robin is ten inches long. The upper parts are grayish slate-color, the head black with a whitish spot over the eye. The wings are dark brown, the tail black. The breast is brick-red, lighter in the female, fading in summer to tan. The throat is streaked with black and white, and the bill is yellow. They range over eastern North America to the Rocky Mountains, including eastern Mexico and Canada.

Bluebirds. Another herald of the spring whose presence pleases the eye and gladdens the ear is the Bluebird, one of the very first to put in an appearance in early March. Their winter homes being in the near South, the migration journey is not long. When the feel of spring first touches their hearts they respond by taking up the northward flight, and in a few days we are made happier by their presence. The male appears about a week earlier than his mate, and "with the sky tinge on his back and the earth tinge on his breast," as Mr. Burroughs so perfectly describes his colors, is the only bit of bright plumage we have, until Redwing arrives with his gaudy epaulets.

His happy warble about the orchard and farm buildings seems to forecast the summer's pleasure he anticipates. No sooner does the female arrive than the mating takes place, and the happy pair immediately look for a suitable tenement. A hollow fence post, stump root, abandoned Woodpecker's hole or bird box are all regarded as likely situations, and no sooner is the choice made than the nest building begins. They are not experts in this direction and they

do not need to be, as the receptacle itself furnishes much protection for the brood. In fact the nest is merely a bunch of dried grass, loosely put together. The five or six pale blue eggs are quickly laid, and in about twelve days the nestlings are hatched. The young remain in the nest about two weeks, then make their first venture into the world clad in their fuzzy, short-tailed suits of spotted blue and light.

Both parents take part in building the nest and caring for the young. Usually the male takes charge of the first brood, leading them to some secure feeding ground while the industrious mother rears a second brood.

We have them as tenants nearly every year, and they make delightful neighbors. Sometimes, after the young are quite grown, just before leaving home in the early morning they will hop to the near-by windowsill of our chamber and peek in, old and young, with much gossip which we do not at all understand.

While Bluebirds are usually regarded as gentle and amiable, they will fight fiercely with other birds, particularly the English Sparrow, for a nesting place. And the male, during incubation, jealously guards that portion of the lawn which he regards as his, fighting vigorously and driving away any intruder, be it Robin, Swallow, Sparrow, or even the quarrelsome Kingbird.

Their notes in spring, usually uttered from a perch, sound like "*cherry, cherry, cheer up*"; in the fall after they have gathered in flocks, they wander about uttering the mournful "*tur-*

we, tur-we," perhaps their expression of regret at the waning season which will soon necessitate their departure from the scene of their happy home-making. Like the Robin, their nests are very generally distributed in park, field, pasture, orchard and lawn, but they do not frequent the deep woods. Their summer range extends over eastern North America to the base of the Rocky Mountains, as far north as New Brunswick, Ontario and Manitoba. They winter from New York southward.

The plumage of the male is azure blue above, the feathers of the wings having dark edgings. The throat, breast and sides are brick-red, belly white. In the fall the blue is somewhat tinged with rusty red. The blue of the female is duller and the breast paler. They are about seven inches long.

Chapter VII

VIREOS

"Upon the lofty elm-tree sprays
The vireo rings the changes sweet,
During the trivial summer days,
Striving to lift our thoughts above the street."

—Thoreau.

The Vireo family is one that will fully repay in enjoyment for the time spent in making their acquaintance. Because they are summer dwellers in thick-topped elms, maples and beeches, veritable bowers of green, they were called Greenlets by the early writers, and the name is still used for its evident aptness. There are fifty varieties of Vireos in all America, the majority of which are found south of the United States. Fifteen varieties are known in the United States, only five of which are common in the East. Their food consists of insects which they catch while perched, worms and grubs which they glean while slowly moving about among the leaves. They also search the crevices of the bark for spiders, beetles and caterpillars. Thus we see they are very beneficial to man, since they destroy countless insects which work great injury among the trees of orchard, forest and lawn.

There is a strong family resemblance among

the Vireos in plumage, form and size. All are excellent architects, suspending from the fork of a convenient branch at some distance from the ground deep basket-like nests of fine bark, paper, plant-down and rootlets. They are probably, so far as fine work is concerned, our best and most artistic nest builders, and so much alike are their structures it is not easy to identify them unless the nest is associated with its maker.

The Warbling Vireo. A daily visitor to the shade trees of our lawn is this plainly dressed little Vireo. We are very grateful to him for his many careful gleanings of leaf-destroying insects, and we should welcome him as a resident but he prefers a nesting site in a thick-topped maple in a neighbor's dooryard. But he sings for us daily, even in the midday heat when most birds are silent. His song, as suggested by the name, is a warble, and while in no way to be compared with the splendid performance of the Purple Finch, it is a pleasing melody, flowing and mellow, that suggests to you contentment. The most common call note is a harsh, squally utterance, much like the call of the Catbird, seemingly quite out of harmony with the song and general makeup of this otherwise attractive bird.

The Warbling Vireo is a plainly dressed little bird, rather smaller than the Song Sparrow. The upper parts are ashy olive-green, with head and neck somewhat lighter. The whitish under parts are washed with yellow, brighter on the sides. This bird arrives in early May, ranges

as far north as Hudson Bay, wintering in the tropics.

Red-eyed Vireo. Much more conspicuous in song than the little bird just considered is his larger cousin, the Red-eyed Vireo, or Preacher Bird, as he is commonly called from the peculiar style of his utterance. He is an inhabitant of orchard and shade trees, roadside and city parks, as well as the woods, and from his leafy retreat at all hours of the day, even at high noon, may be heard his emphatic notes.

This is our most common Vireo, a fearless, gentle, lovable bird, usually in good temper, who pursues the even tenor of his way with little sign of alarm or suspicion when you invade his nesting grounds. If in his vicinity, all you need do is to wait patiently and he is pretty sure to show himself, for he is usually on the move.

They are plainly dressed and yet their delicate shades and smooth feathers make them rather handsome birds. The crown is dull gray with black stripes on either side, and a distinct white line over the eye. Otherwise the upper parts are light olive-green; the under parts are pure white. The iris of the eye is red, an excellent field mark when the bird is near.

The song of the Preacher is easily identified for its characteristic qualities. Henry Ward Beecher, ascribing to the bird a devotional nature, said of him, "He pauses between each morsel of food to give thanks to Heaven," an excellent interpretation of his motive. Wilson Flagg's description of his song is highly appreciative: "His style of preaching is not declam-

atory. We might suppose him to be repeating moderately with a pause between each sentence, 'You see it, you know it, do you hear me? Do you believe it?' All these strains are delivered with a rising inflection at the close and with a pause as if waiting for an answer." Thoreau spoke of him as singing "like a Robin at even, incessantly," and there is more similarity in their songs than is here expressed, for the notes of the two birds are much alike in tone quality. But where the Robin is always hurried and evidently anxious to get to the end, the Preacher is deliberate, unhurried.

The summer range of this bird is very extensive, over the greater part of North America from the Gulf to Labrador, even to the Arctic regions. They winter from Florida southward. The nest of the Red-eyed Vireo is suspended from the fork of a limb of maple, birch, elm or apple tree. It is made of bits of birch bark, hornet's paper and plant fibre, lined with finest grass. In the nests I find bits of white birch bark are very conspicuous. The eggs are white with reddish spots. It is said the male aids in incubation, and often sings as he sits on the nest. The nesting season is rather late. They arrive in New York City in early May and leave toward the end of October.

Yellow-throated Vireo. Like others of the family this Vireo spends its time largely in the leafy treetops. In migration they are seen about city parks and lawns, in the orchard and along the roadside. But as the nesting season approaches they withdraw to the soli-

tude of the woods where is built a house which must be at once the joy and despair of every other member of this artistic family. It is woven of strips of bark and plant fibre, lined with fine grass, and covered on the outside with dainty lichens, a wonderful little cup at once dainty and highly adapted to its purpose. The location selected for this wonderful nest is often so wild and romantic that you will declare it quite in keeping with the character of the nest.

This is a sleek, rather stoutly built Vireo, somewhat smaller than the Preacher, with a very attractive suit of light olive-green above, bright yellow throat, breast and eye ring, and two distinct bars of white on the wings. They come to us about May 1, and nest from Florida to Newfoundland.

The song of the Yellow-throat resembles that of the Preacher, but it is more deliberate, richer and fuller, a much more pleasing performance. It is often said the Yellow-throat is the contralto, the Red-eye the soprano of the bird chorus. It, too, sings at midday as well as at morning and night, and it sings in flight.

The White-eyed Vireo. This little virago of the bird world has a range somewhat less extended than the foregoing species. They are rare birds in central New England and are practically unknown north of that region. Farther south, however, in New Jersey and Long Island, they are classed as common summer residents.

While they are possessed of considerable

musical skill, so irritable and ill humored are they that they bear a very bad reputation among bird students. "Impertinent," is the word Mr. Chapman uses in describing them; "saucy" and "querulous" are words often applied to this scold. Yet Mr. Bradford Torrey regards them as possessing much skill in musical expression. The notes of the bird seem to me in keeping with its character. They are high pitched and emphatic, and it often appears that the bird joins together snatches of the songs of half a dozen singers in a medley that is both highly amusing and remarkably executed.

This is one of the birds often imposed upon by the Cowbird, for with all its irritable temper it has a tender heart, or else is very stupid, for instead of pitching out of the tiny nest, perhaps already filled with her own eggs, the large egg of this lazy intruder, the little mother will hatch it and care for the fledgling with the same tenderness bestowed upon her own. And it often happens that this larger youngster crowds out of the nest the rightful occupants. Surely the Cowbird has great foresight in the selection of a nest in which to lay her egg, for she could scarcely find a kinder-hearted mother, with all her shrewish habits of temper.

The White-eyed Vireo is slightly smaller than the Warbling. The upper parts are bright olive-green with washings of gray. The under parts are whitish, the breast and sides washed with light yellow, and there are two distinct wing bars. The iris is white, and there is a yellow ring around the eye. Its nesting habits are much like those of the Solitary.

Solitary Vireo. This bird is also known as the Blue-headed Vireo, because of the handsome bluish-gray color of the crown and sides of the head. While it is not a rare bird, it is a forest-dweller and far from abundant, though one could easily wish to have them for intimate friends, so lovable are they. Its songs are varied both in tone and quality. Its chief performance is something like that of the Red-eyed, but has a tenderness all its own. It has been called a "pure, serene uplifting of its loving nature." Its most common utterance is a musical chatter, strangely resembling the notes of the Baltimore Oriole, and it also has a flowing warble, tender and thrilling, rather an unusual repertory you will say for so modest a little creature. They are exceedingly tame and trustful, especially when nesting. It is said one may approach close to the nest, even freely stroking the sitting bird, but probably this is true only in rare cases.

The Solitary is the first of the Vireos to arrive in the spring, reaching the vicinity of New York in April, and the last to depart in the fall. Their notes are heard even as late as September. They nest in the woods, building, as do all their relatives, a wonderful little cup-shaped nest, which is suspended from a limb several feet above the ground. The eggs are white, sparsely speckled with umber.

Chapter VIII

A SUMMER CHORUS

Bobolinks, Orioles, Cowbirds, Blackbirds, Meadow Larks

"June's bridesman, poet o' the year,
Gladness on wings, the bobolink, is here;
Half hid in tip-top apple-blooms he swings,
Or climbs against the breeze with quiverin' wings,
Or givin' way to't in a mock despair,
Runs down, a brook o' laughter, thru the air."

—Lowell.

Several birds, so widely different in feeding and nesting habits, plumage and song that it is not easy to see the resemblance usually noted among members of a family, are considered in this chapter. They are for the most part gregarious after the young are reared. Their food is varied—seeds, fruits, berries and insects. It is an American family, most abundant in Central and South America.

Bobolink. Each year when, about the twentieth of June, I arrive in our little valley in Maine, the broad, upland fields about our house are fence full of lush herdsgrass and clover, thickly strewn with buttercups and daisies. Many birds nest in this excellent cover, the most conspicuous of which, if not the most abundant, is the Bobolink. Not only does his gay suit compel

attention, but his song is heard throughout the day as he hovers on trembling wing above his ground-set nest, or swings and sways on the stout grass stalks. His best musical efforts are heard when the bird is on the wing, and what a singer he is! His rollicking, bubbling, tinkling notes roll and tumble from his throat in a torrent that seems to have its source in an inexhaustible fountain of melody. There is no describing his song in words, but Wilson Flagg's "The O'Lincoln Family" is very suggestive:

"Every one's a funny fellow; every one's a little fellow;
Follow, follow, follow, follow o'er the hill and in the hollow,
Merrily, merrily there they hie; now they rise and now they fly;
They cross and turn, and in and out, and wheel about and down the middle
With a phew shew Wadolincon; listen to me Bobolincon,
Happy's the wooing that's speedily doing, that's speedily doing,
That's merry and over with the bloom of the clover;
Boblincon, Wadolincon Winterseeble, follow, follow me!"

The notes of this meadow minstrel are indeed "over with the bloom of the clover," for when the scythe invades his grassy home his song dies as though the warder of the season had issued a stop order. The song is not dropped in a single day, but piecemeal, and with its disappearance there is heard his call note, a highly metallic "*chink*" that is not heard earlier in the season. Thoreau said of his notes, "They are refreshing to my ear as the first distant tinkling and gurgling of a rill to a thirsty man. . . . But away he dashes and the meadow is all bespattered with melody. His notes fall with the apple blossoms in the orchard." The Bobo-

link's notes have been called a species of musical fireworks.

Of his dress, Bryant sang:

"Robert of Lincoln is gayly drest,
Wearing a bright black wedding coat.
White are his shoulders and white his crest,
Hear him call in his merry note!"

Add to this description that the neck and middle of the back are corn-yellow and the tail feathers sharply pointed, and you have a good picture of a feathered dandy. But how different is the color of his little mate. Yet her "Quaker" dress is much better adapted to her domestic cares, sitting on the nest and tending the youngsters among the brown grass stalks. The color of her back always reminds me of the brown of the Meadow Lark, another inhabitant of the grass fields that surround our home. Her dress above is olive-buff streaked with dark brown and there are two distinct black stripes on the head. The under parts are yellowish white. At the moulting, which follows the nesting season, the male changes to the colors of the female, donning a traveling suit, as it were. Then they gather in flocks and frequent the grain fields, and by mid-August begins the long journey to their winter home in far-away Brazil.

As they travel through the Middle States, they are known as Reed Birds, and farther south as Rice Birds, from their feeding habits. Under these names they are, alas! classed as game birds, and thousands of their fat bodies are eaten in the fall by Southern epicures. It

may be said in extenuation of what seems to the bird-lover of the North a heartless killing of one of our most attractive birds, both in song and plumage, that the hunters of the marshes of Maryland and the rice fields of the Carolinas never see Robert Lincoln at his best. To them he is plain of plumage, without song, his only utterance at that time being his metallic "*chink*," and he is so fat from constant gorging with food that his skin breaks when he falls under the hunter's aim. Notwithstanding this, however, I cannot bring myself to believe that the killing of this splendid bird is in any way justified, and my earnest prayer is for uniform protection of him in all our States.

The nest is made of coarse grass, lined with fine grass and usually placed on the ground. The five or six eggs are grayish-white, mottled with irregular olive-brown. They nest from northern New Jersey northward to Nova Scotia and west to Utah. They appear in early May.

Cowbird. There could scarcely be imagined a greater contrast in all those characteristics that make a bird attractive to man, than that which exists between the Bobolink and the Cowbird. As we have seen, the former is attractive in song and dress and lovable in every way; the latter is unattractive in coloring, without song, and in its habits a despised and detested bird. Not because of plain colors or lack of musical ability is this estimate put upon him, but because they utterly refuse to assume the cares of rearing a brood, shifting their domestic duties upon some little mother perhaps

already overburdened with her own affairs. Thus they are the pariahs, the outcasts of the bird world.

Cowbirds neither build nests, hatch their eggs, nor feed their fledglings. Instead, this unnatural bird sneaks into the nests of defenceless Warblers, Vireos, and Sparrows, laying an egg here and there until her full brood is deposited, leaving the future of eggs and nestlings to the tender mercies of the nest owners. In this way the eggs may be scattered in a half dozen nests. The young bird is much larger than the other nestlings and grows so rapidly it soon fills the nest, to the discomfiture and distress of the rightful occupants. Sometimes the tiny inmates are pushed out of their own home by this overgrown intruder. It is not easy to explain why the mother bird does not pitch out the egg of the Cowbird as soon as it is deposited. Instead, it often seems that she will bestow upon egg and young even more tender care than upon her own. It is a strange sight to see a dainty Warbler or Vireo feeding a clumsy young Cowbird, much larger than herself. But these anomalies give to bird study an added interest. As soon as the young Cowbirds are able to fly, they seek their own and remain in flocks till they depart in late fall.

Cowbirds appear early in the spring in small bands, alone, unless with English Sparrows, for they are shunned by self-respecting birds. They are seen with the cattle in the pasture, picking up the insects disturbed by the grazing. It is an interesting sight to see them perched and quietly

resting on the backs of the cattle as they lie peacefully chewing their cuds after the morning's feeding is over.

The color of the male is rich coffee-brown on the head, neck and breast; elsewhere the plumage is shiny black. The female is dark slate-brown above, lighter below. They breed as far north as lower Canada and winter from New Jersey southward. The egg is white, evenly sprinkled with cinnamon-brown. This bird is eight inches in length.

Meadow Lark. While this bird bears the name Lark, it does not properly belong to that distinguished family, whose best-known member is the famed Skylark of Europe. The Meadow Lark was not a resident of our valley in my youth, but first appeared there some twenty years ago and now is a very common summer resident; in fact he is with us most of the year, for he comes early and stays late. In the Middle States he is classed as a permanent resident. But the great majority of them move southward in late autumn, wintering in the near Southern States. I do not find them in the parks of New York City, but in the open fields in the suburbs, Flatbush, Flatlands and Bath Beach they are common enough.

Their ringing notes, "*Spring o' the year,*" are very welcome sounds, especially in March and April when the ear is eager for bird song. From the topmost branch of a tree, from a telephone pole, even from so low a perch as the stone wall he whistles his clear and musical strain. But thus exposed he is rather shy, and

MEADOW LARK

quickly takes wing, as you approach, with a peculiar, fluttering, trembling motion, half flying, half sailing to a safer location in the fields of grass. Besides this song he has a series of rather harsh, grating calls, rather unpleasant to the ear, especially when the bird is alarmed. It is said his western cousin far surpasses him as a vocalist.

Probably the greatest attraction of the Meadow Lark is his fine plumage which presents a symphony of coloring that is not surpassed among birds. So perfectly do the streaked black, brown and gray of his back harmonize with the color of the grass stubble where he lives, that were he to keep quiet, he would rarely be discovered. The sides and under parts are whitish, spotted with black, except the breast which is a beautiful yellow with a very distinct black crescent. The outer tail feathers are white, a most conspicuous field mark in flight.

When the Meadow Lark lights, if he sees you looking at him, he shakes and flutters his tail as though in anger at your presence. He will watch you for a moment and then take up his search for food, skulking through the grass much like a young turkey in pose and movement. Although rather shy, they sometimes nest within a hundred feet of our lawn. The structure of coarse grass, lined with finer grass, always on the ground, is sometimes roofed over. The eggs, four to six in number, are white, thickly spotted with fine brown spots.

The summer range of the Meadow Lark is broad, from the Gulf of Mexico to New Bruns-

wick and Minnesota. They winter from Massachusetts southward and return to us in early March. They are nearly eleven inches in length and rather plump. Formerly they were considered as game birds and annually hunted by the man with dog and gun.

Orchard Oriole. A bird seen about the shade trees and wooded parks of our Northern cities as well as in the orchards and shade trees of the farm is the Orchard Oriole, a bird of refinement in dress, song and manners. It does not range so far north as the more abundant variety, the Baltimore Oriole, and can scarcely be classed as a common bird in New England; but in the Middle States they are found in goodly numbers.

The dress of the male is much less showy than that of his cousin, and some there are who regard it as in better taste. The head, neck, throat and upper back are black, the rump and under parts rich chestnut, while the wings and tail are olive-brown tipped with whitish. With the female the upper parts are olive-green, the head and rump brighter. The wings are olive-brown tipped with whitish, the under parts dull yellow.

As a singer the Orchard Oriole excels in expression and flexibility of its short, clearly voiced notes, and there is much of the same quality manifest in the full clarion-like song of its brilliant relative. This bird seems very happy as it works about its nest in the sweet-scented orchard, its snatches of melody a spontaneous voicing of its gratitude.

The Orchard Oriole is an excellent nest builder. He suspends from a conveniently forked branch, a basket-like structure skillfully woven of fibrous materials and neatly lined with fine grass and hair. Sometimes it is placed in the fork of a branch. The eggs are three to five in number, bluish white, marked, spotted and scrawled with dark brown or black. This bird is about seven and one-half inches long. They range in summer from the Gulf States to Massachusetts and Ontario, wintering in the tropics. They arrive in the vicinity of New York in early May.

Baltimore Oriole. A very handsome member of our summer chorus is the Baltimore Oriole, the bird that was found by the early settlers of Maryland so proudly wearing the orange and black of their leader, Lord Baltimore, that he has since borne that distinguished name. Flashing about in the treetops, he is so brilliant that he has been given the name of Firebird. His bold and martial notes would attract attention were his dress less showy, for his vocal efforts are very prominent in the bird choir. He sings in clear, rich tones, slightly metallic, a variety of songs, none of which seem to be quite finished. His vocabulary also is varied, and we hear many clearly whistled notes somewhat softer than his songs. Altogether he is a very noisy fellow from his arrival in May till the nesting time is passed. Then, in company with his plainly dressed family, he journeys about with much conversation to be sure, but less of his warlike trumpeting. All in all, he

is a splendid musician, enjoyed and admired by all who know him.

As nest builders these Orioles are among our most interesting birds. The bag-like structure, several inches deep, is woven of horse hair, twine, plant fibre, bits of cloth, paper, etc., and suspended from the end of a swaying bough, usually that of an elm tree. It is lined with hair, cotton, etc., a safe and cozy cradle for the nestlings where they may swing and sway in the gentle breezes, secure from all harm. We have a nest made from twine, which we put out for a pair of Orioles that nested for years in an elm standing in a neighbor's dooryard. No other material enters into the composition of the nest except the horse hair, rootlets, and cotton used for a lining. It is so securely fastened to the forked branch from which it was suspended, that it could be removed only by cutting away the strings, some of the strongest of which are wound round and round the branches, then passed through the nest as the main supports. As the twine was highly colored, the nest was at first rather gaudy, but a season's sun and rain faded it not a little.

Orioles have a bad reputation among owners of orchards and vineyards, for they spoil much fruit by puncturing it with their sharp bills. It is believed, after careful investigation, that the thirsty bird is seeking the juice of the fruit. A remedy is said to be had by placing vessels of water where they may be readily found. Sometimes the Orioles puncture the white Astrachans that ripen in our garden in August. But I have

little fault to find with them, for their presence more than repays the small loss of fruit. Besides, they do much good by destroying countless beetles, caterpillars, moths, etc., which would work much injury to orchard and vineyard.

The male Baltimore Oriole is a strikingly handsome bird. The entire head, throat, upper back and neck are black; the black wings are edged with white and the tail feathers are orange, the outer ones with a black band near the middle. The lower back, lesser wing coverts, breast and belly are bright orange. With the female the black is washed with olive-green and the orange is much duller. They retain their bright colors after moulting, rather an unusual condition. There is a second period of song in August and early September. These birds range in summer over eastern North America, nesting from the Gulf of Mexico to Canada, and wintering in Central America. This Oriole is about eight inches long.

Red-winged Blackbird. One of the early comers, whose presence gladdens the eye, is the Red-winged Blackbird, as he is misnamed, for his wings and entire body are coal black, except for the shoulders which are a brilliant red edged with yellow, a most striking contrast to his otherwise somber suit. The sexes, it is said, are segregated during their sojourn in the south, and in consequence the flocks of males precede by a few days the females. When they first arrive in early March, for a time they roam about in a careless way, but with the mating season the flocks divide and they seek nesting

places, usually in small colonies, about bush-grown marshes and cat-tail swamps near water. In summer when I approach the boat landing at the brook mouth, I am greeted by the harsh "*chock, chock*" or a squeaky "*che-we-e-e-e*" of the male from his perch on the highest bush, where he has an unobstructed view of the surrounding country for a long distance. As I near him, he rises on fluttering wing, circles about above my head, then as I disappear in the thick alders, swings back to his perch with his ringing "*con-quer-ee, ok-à-lee.*" In the short marsh bushes in the center of the little cove where the brook and river join, his mate is carefully tending the nest, else her "*chuck, chuck*" would be heard as soon as my approach is announced.

Each year, in wading boots, I make my way out to the nest, so well concealed in the pucker brush that I am not sure of its location till quite upon it. The nest is a deep, well-made cup of coarse grass lined with fine grass, and fastened to a bush by twine strings and straws. The eggs are pale green with black blotches and stripes, as irregular as though scrawled with a sharpened stick dipped in ink. The nests are not far above the marsh and sometimes a rise of water in June overflows and destroys them with their contents.

The plumage of the female Red-wing has a peculiar beauty that is realized only when the bird is near at hand. The upper parts are blackish streaked with brown, and ashy; the under parts are streaked dark and light and the throat is yellowish. The male is about ten inches in

length. The female is notably smaller. They range over eastern North America, from the Gulf of Mexico to Manitoba and New Brunswick, and winter from Virginia southward.

Rusty Blackbird. In late March, or early April, you will see small bands of Rusty Blackbirds about the edges of swamps, bush-grown banks of streams, and inland meadows. At first they may puzzle you as to their identity, for they are rather inconspicuous in color and are seen only for a short time when passing through to nesting grounds in the North. The spring dress of the male is a uniform, glossy black with a bluish sheen in the sunshine. Later there appears a rusty tinge, which gives the bird its name. The female has a fine slate color above, with the under parts somewhat duller. Both sexes have pale straw-colored eyes like the Grackles. Rusty Blackbirds are notably smaller than Grackles, being about nine inches in length, the approximate size of the Red-wing which they resemble in flight and call notes. They breed in colonies in swampy thickets that border ponds and dead water streams. The nest is built of sticks, moss and coarse grass, several feet above the ground. Their feeding habits are much like other Blackbirds, but there are no grain fields to which they may resort. They range in summer from the northern part of the United States northward, wintering south of Virginia.

Purple Grackle. With the outpost of the advancing army in March appears the Purple Grackle, a bird whose reputation seems to be

worse than his character warrants. I see them on the green in Prospect Park, searching for food along the banks of the ponds and streams, and in the evergreens where they build; and on the whole they seem to be rather attractive birds. Perhaps I have not seen them at their worst, when they are said to destroy the eggs and young of small birds and to pull corn extensively. The glossy black coats of the males have a fine metallic lustre as they walk about in the sunshine, but the females are duller and with little of the iridescence so apparent on the male. The iris is bright yellow.

Purple Grackles are about a foot in length. The tail is long and wide, usually held high, giving a peculiar pose to the bird when seen in profile. They mate early, and by the beginning of June their dull-coated youngsters may be seen in their first attempts at flying. The Grackles are not musical birds. They have a series of wheezy calls so harsh and cracked that it has been denominated the "wheelbarrow chorus." Their summer range is north to Massachusetts and they winter in the Southern States.

Bronzed Grackle. This bird is closely allied to the above in color and habits; in fact so nearly alike are they in plumage it would be very difficult to distinguish between them unless both birds were in hand. The Bronzed Grackle is without the iridescent bars. Their notes, as I have observed, are only a rasping "*chack*," and a wheezy unmusical clatter when they try to sing. The food of both species is largely composed of beetles, grubs, cutworms, caterpillars, grass-

hoppers, and the eggs and young of many birds. Both species are called Crow Blackbirds. The Bronzed Grackles have an unusual range, from the Allegheny Mountains and southern New England to Newfoundland and the Great Slave Lakes west to the Rocky Mountains and south to Texas and Louisiana. They winter in the lower Mississippi region and Mexico, rarely in New England. I find them about my home in Maine, but the Purple Grackle is unknown there.

Chapter IX

WOODPECKERS

'Ah! there is the note of the first flicker, a prolonged,
Monotonous wick-wick-wick-wick-wick-wick,
But how that single sound peoples and enriches all the
Woods and fields! It seems to put a life into
Withered grass and leaves and bare twigs and henceforth
The days shall not be as they have been."

— Thoreau.

Woodpeckers are the carpenters, or wood cutters, of the bird world. The structure of the skull and the sharp-edged, chisel-like bill are well adapted to the cutting and pecking habits of these birds, by which means they obtain their food supply and excavate their homes. They are also supplied with long, slender and very sharp-pointed tongues which may be extended to some length, excellent implements for impaling and withdrawing the exposed grub. With the exception of one variety, Woodpeckers are rarely seen upon the ground. They are creepers and climbers, the structure of the feet being the best possible to aid them in clinging to the perpendicular tree trunks, or to the under side of horizontal limbs. Stability is given to the body while in such position by the stiff spines of the tail feathers which make excellent braces. Thus we see in these birds that form and structure of the various parts best adapted to their habits.

Woodpeckers have no gift of song, but instead, in the mating season, as a love call, they beat a lively tattoo upon some dead limb. All the family, however, do have shrill call notes characteristic of the various species.

This is a very large family distributed generally throughout the earth. There are about twenty-five varieties in the United States, eight of which are common in the East. All have similar nesting habits, building in a hole of their own excavation in dead tree or stub, a loose nest. The eggs are uniformly white.

Hairy Woodpecker. This very active friend of the farmer is more often found in wooded sections where there are plenty of dead and decaying trees which invite the exercise of his trade. In cold weather they are frequently seen about the orchard and trees of the lawn, where they render valuable service in the destruction of eggs and larvæ of injurious insects.

If you watch him at work on the trunk of a dead tree, you will see him scramble up, then stop to listen for sound of borer, and, when he has located one, begin with zest and skill to cut it out. His head rises and falls with rapidity and regularity, the effect of his labors plainly seen by the flying chips and bark. When the grub is uncovered, out darts the sharp tongue to impale it, and it is swallowed with a sharp "*cleur*," his cry of satisfaction with the palatable morsel.

This Woodpecker is about the size of the Robin, ten inches in length. The black and white feathers of the back are fine, almost hairlike in appearance; hence the name Hairy. The wings

are roughly striped with black and white, there is a white stripe over the eye, and the under parts are white. Thus you see their colors are pure white and black. But the male has a striking feature, a bright red patch on the nape of the neck, which the female does not have. Their size distinguishes them from their smaller cousins, the Downies.

They are found as permanent residents throughout the Eastern States, north of the Carolinas, but are more common in the northern portion of their range. Their nest is usually in a hole in a more or less decayed tree, having its entrance toward the east or south. The hole extends into the tree a short distance, then turns downward for a foot or so, ending in a chamber where are laid the three to seven shiny-white eggs. One can hardly imagine a safer nesting site, and it seems there must be fewer tragedies among Woodpeckers than among birds nesting in the open. Yet, no doubt, prowling red squirrels and weasels often find them out. They are solitary birds, practically never seen in flocks and usually alone, except in the nesting season.

Downy Woodpecker. The relationship between Downy and Hairy Woodpeckers is very apparent in form, color and habits. In fact the Downy seems to be just a smaller prototype of the Hairy, except for slight differences in markings of the plumage. With the Downy, the outer tail feathers are white, barred with black, while Hairy has no black on these feathers. The male Downy also has the dash of red on the

nape, which is lacking with the female. They are about seven inches long.

The Downy is much oftener seen in the open country about the lawns and parks of the city, in the shade trees and orchards of the farm. His gentle call, "*peek, peek,*" softer and more pleasing, is a common sound in the springtime, and is closely associated with his tapping which consists of a long, continuous roll, very rapidly executed on some dry, resonant limb, and audible at considerable distance. This is his love note, and that it is effective in securing a mate is evidenced by the numerous families of young Downies that will make their whereabouts known to you by their almost continuous squeaking cries for food as you make your way about second-growth woods in late June. Since they, too, are skillful wood cutters, the nesting habits of the Downy are almost identical with those of the Hairy. The eggs are usually six in number.

The Downy is a more social fellow than his larger cousin, being often seen in company with Chickadees, Nuthatches and Brown Creepers. He, too, is a great friend of the farmer, since he searches out and destroys countless eggs and grubs of insect pests. The larger part of the tattooing seen on the trunks of old apple trees is Downy's work, but instead of its being an injury to the tree it is positive proof that he has been doing his duty in protecting the tree from its too numerous enemies. Farmers are coming to appreciate the value of these little assistants, and now look upon them with approving eye.

They are permanent residents throughout their range which extends from Florida to Labrador.

Arctic Three-toed Woodpecker. This bird has a more northern range than the preceding species, being rarely seen in the United States, except in the extreme northeastern portion. In winter they range somewhat farther south, but are not then common birds. Since they feed almost exclusively on the grubs which work in decaying wood in the dead stubs, where severe forest fires have raged, or the water in a lake has been permanently raised, these birds will be found nesting.

They are in size similar to the Hairy, but they have only three toes, two in front, one behind. The general color of the upper parts is shiny black. There is a bright orange patch on the crown of the male only, and the wings are spotted and barred with white. The under parts are white and there is a white line below the eye. They are restless, active birds, rather shy except while nesting. Their flight is rapid and somewhat undulating, and their cry is a loud shrill "*we-e-a, we-e-a,*" heard as they approach and leave the nest. I found these birds nesting in June near White Cap Mountain, and also in the West Branch region in northern Maine.

American Three-toed Woodpecker. This is another Northern resident, found in summer only in the forest sections of our states which border upon Canada, and northward to Labrador. In the winter season they make short southern movements to more civilized sections where, occasionally, they may be seen about

farms and orchards. This, too, is a three-toed Woodpecker, often called the Ladder-back, a name that is very significant, for his back is distinctly barred with black and white. He, too, has the orange patch on the crown, and the black wings are spotted with white. The outer tail feathers are black and white, and the sides are barred with the same colors. The under parts are white. The female does not have the crown patch of orange.

The American Three-toed Woodpecker is more silent than the Arctic variety and is not so common in the woods I have visited in summer. I have more frequently seen them during their short winter excursions to the farming sections of Maine. Their nesting and feeding habits are practically the same as those of their near relatives, but they are about an inch shorter.

Pileated Woodpecker. Not only is this the largest of our northern Woodpeckers, but in many ways he is the most interesting because of his wild nature, bold cries, and vigorous skill as a wood cutter. He, too, is distinctly a denizen of the dense forests, and while formerly he ranged well south in the eastern portions of the country, I hear of him now only in the deep woods. So tempting a target are they for the hunter in the autumn woods, it appears that they are lessening in numbers. I have found them more abundant and tamer in the pine forests of the South than in the spruce growth of the North.

When making your way along some woodland trail there will come to your ears a strange

sound for such a place, the noise of wood cutting, a close imitation of the sound made when striking a chisel with a mallet. If you listen for a time you will also hear the cry of this woodland carpenter, as he ceases his labors momentarily to send out his bold challenge; or is he talking with himself? "*Cack, cack, chuck, chuck, chuck, chuck, hi, hi*" he goes on, and if you are so fortunate as to approach near enough to see him, you will be surprised at the way he makes the chips fly. His red-capped head rises and falls with great precision and the sound of ripping wood and bark is distinctly heard. The exposed grub is quickly devoured, and away goes this "Cock o' the Woods" in a direct flight, with none of the wavy motion peculiar to all other members of the family.

In the thick woods on the hill back of our house, one day I found a hemlock tree where a Pileated Woodpecker had lately worked, and the sight was most surprising. There was a half bushel of chips, some of them five inches long and an inch wide, cut from the solid wood of the tree which appeared to be entirely sound, and was about sixteen inches in diameter. He had cut eight holes clear to the heart, two of which were eight inches long and four inches wide, tapering inward. A careful inspection convinced me that he was not seeking wood borers, but that the tree was shaky at heart and black ants had ascended to winter there. The holes enabled him to reach these acrid insects as they passed up and down between the shaky rings near the heart of the tree. But what puzzled me

then, as it does still, was this query: How did he know this particular tree was shaky, for its external appearance gave me no sign? I afterward found several dead trees gashed and cut in his search for wood borers. Being less insectiverous than most Woodpeckers, they also eat cherries, acorns, beechnuts and berries of the dogwood. They nest in a large hole far above the ground, even as high as seventy-five feet. The eggs are four to six in number.

This is a large bird, seventeen inches in length, very striking in color. The upper parts are dull blackish with much white on the neck, and when he flies much white is seen on the wings, the basal feathers of which are half white. The whole top of the head is scarlet, so much like the cap worn by the Roman soldiers, called *pileus*, that it has given him the name Pileated Woodpecker. The throat is white, the under parts smoky gray. The female is without the red crown.

Yellow-bellied Sapsucker. This bird seems to have acquired among farmers, a bad reputation, which, in a degree, he deserves. In addition to the insects, eggs and grubs which he finds in the crevices of the bark, by drilling holes into the tree which quickly fill with sap, he secures a delicacy of which he is very fond. This habit has determined his name. The sap attracts ants, flies and other insects, so that when he returns for his fill of the sweet liquid he can also regale himself upon these more substantial morsels. He is said to have great fondness for the inner layer of newly formed wood fibre, the sapwood, which is soft and juicy.

Sometimes these sap wells completely girdle the trunk and the tree in consequence is killed. We have had a good illustration close at hand of what a family of sturdy young Sapsuckers can do in the way of injuring a tree. Each season soon after the first of August, they have attacked a cut-leaf birch on the lawn, drilling many holes in the bark. It seemed the life of the tree was in danger and at first we adopted severe measures. But in later years we found the danger could be avoided by wrapping the trunk with burlap, not a difficult thing to do as their attacks were usually made on the body below the limbs. But it seems certain that had we not taken measures to defend the tree it would have been ruined. Even now it is much disfigured.

It is said this is the only Woodpecker to catch insects on the wing and he is quite expert at fly catching. Not long ago I watched one of these birds making frequent forays from his perch in the treetops upon passing insects, l'ke a veritable Flycatcher. The Yellow-bellied Sapsucker is a migrant that returns in early April from a winter spent somewhere in a range extending from Virginia to Central America. During migration and the mating and nesting season that follows, they keep rather close to the woods. But after the young are reared, they are seen much in the open about parks, shade trees, and orchards of the farm; in fact, wherever there are deciduous trees. The male calls his mate by beating a tattoo, but they have a few vocal utterances. During migration and in

Courtesy of the National Association of Audubon Societies

FLICKER

the open they are silent, but in the woods their loud discordant screaming "*kleur, kleur,*" is oft repeated.

This is a very handsome bird. The crown and throat of the male are deep scarlet; the back is marked with black and yellowish-white bars. The breast has a black crescent; otherwise the under parts are light yellow. The wings and tail are barred and spotted with black, and a white line passes from the bill below the eye, broadening on the neck. With the female the throat is white, the crown often black; otherwise her dress is the same. They nest from Massachusetts northward. They are about eight and one-half inches long.

Flicker. This is a popular bird, for he is said to be known under at least thirty-six different names. The most common of these in the East are Yellowhammer, Golden-winged Woodpecker, High-hole, Yarrup and Clape. He is a very handsome fellow, and a general favorite with mankind. He possesses beautiful plumage, gentle ways, attractive notes and interesting habits, and is very tame. Often one comes bounding into the trees about our house, and sometimes they come quite close on the lawn. So trustful and confident are they of man's good intention toward them, in the South during the winter I have been almost near enough to reach them with my hands. In the city parks they are common, finding suitable nesting places in tall trees there. Now, effort is being made in many places to provide them with such attractive homes that their numbers will increase.

The Flicker is a bird of the open, and, consequently, is the best known of his family. As they feed upon ants, like the Pileated, they are often seen on the ground about decaying logs and stumps, where they find a generous supply of these insects. Sometimes Flickers visit the fields in search of grain and berries; they also feed upon nearly all insects within reach. Consequently they are less given to drilling for grubs than most Woodpeckers.

Their flight is deeply scalloped, a sort of bounding process. They are great talkers and their voluble conversations are very familiar sounds in spring. When several birds meet, with much bowing and scraping, a common note is a low, melodious "*wick, wick, wick.*" Another call is a rapidly repeated "*chu, chu, chu, chu, chu, chu,*" and a shrill "*kee-yer, kee-yer,*" is more often heard in the fall. There are other notes, all characteristic of this interesting summer visitor.

In plumage the Flicker is one of our handsomest birds, presenting a variety of beautiful colors. The head and neck of the male are bluish gray with a scarlet patch on the nape. The back and wings are brownish with black bars, the rump white. The under surface of the wings and tail is yellow, the belly and sides light, thickly spotted with black. There is a black stripe on either side of the throat and a black crescent on the breast. The female lacks the black patch on the throat, but otherwise has the same coloring. When at rest, the Flicker is best known by the scarlet nape and black cres-

cent on the breast. In flight an excellent field mark is the white rump and the golden lining of wings and tail. Their range in summer is west to the Rocky Mountains and Alaska, from North Carolina to northern Canada. They winter from Massachusetts southward.

Red-headed Woodpecker. Sometimes in summer when passing through their haunts I see from a railway train this conspicuously marked Woodpecker, flying slowly along and alighting on some stub not far from the track; and through the open window, even above the din of the train, I hear his harsh "*ker-ruck*," which has been likened to the cry of a treetoad. This bird was unknown to me in Maine, except by reputation, and he is not a common bird in any part of New England. It is said they, too, have fallen victims to the man with the gun, seemingly the inevitable penalty for wearing conspicuous dress. Mr. Burroughs speaks of them as having been numerous as Robins about Washington during the Civil War, but now they are less abundant throughout their range.

This, too, is a very handsome bird, but less beautiful than the Flicker. The head, neck, throat and upper breast are deep red; the back, rump and under parts white. The wings and tail are bluish black, the wings with white bars plainly seen in flight. Their appearance on the wing is not unlike the European Magpie, except that they are notably smaller. The Red-head is about nine inches in length, the Magpie nearly a foot.

This Woodpecker, too, feeds on grubs and

worms found in decaying wood, and he eats fruits, as peaches, plums, grapes, and a variety of berries and other vegetable kind. They also feed upon nuts, acorns, beechnuts, and they have the reputation of destroying the eggs and young of other birds, something hard to believe in so tame and, withal, so gentle a bird. They nest in old trees and sometimes in holes cut in telephone poles; but, with the exception of the Flicker, they seem less skillful in using their bills than other members of the family. Both male and female help at the work of excavating. They are tame birds, seen about the city parks and shade trees of the village, always conspicuous for their red, white and black.

Red-heads have the unusual habit of storing up food, nuts of various kinds, in convenient holes about wooden fences, and in the crevices of the rough bark of certain trees. This supply of food sometimes keeps them from migrating, although the great majority spend the cold months in Virginia and farther south. Their summer range covers southern New England, the middle and Southern States, and they are permanent residents in the southern portion of their range, sometimes, as we have seen, even in New York State.

Chapter X

WINTER COMRADES

Brown Creeper, Nuthatches, Tits, Kinglets, Jay and Crow

"Winter comrades, well betide ye,
Friendly trunk and hollow hide ye,
Hemlock branches interlace,
When the northern blast gives chase."
— Edith M. Thomas.

Brown Creeper. This little bird is the only American representative of a family which numbers in all the world a dozen varieties, but he may be regarded as typical of his kind. In the Northern States he is found more frequently in winter, and is probably a permanent resident throughout that portion of his range.

I often find Brown Creepers in the winter woods in company with Chickadees, Nuthatches and Kinglets, so busily searching the bark of tree trunks for the eggs and larvæ of various insects that this seems their only purpose in life, and the fact is they are rarely seen doing anything else. From the foot of a tree he winds his way upward in spirals, supported in his course by the sharp spines of his tail feathers, which he uses as a brace, like a Woodpecker. The trunk searched to his satisfaction, down he darts, with a faint metallic squeak, to the foot

of another and the same process goes on, hour by hour, day by day. He is the symbol of dogged persistency, and there is nothing joyous or pleasing about him, except the fine harmony between the colors of his back and the bark of the trees he frequents. So perfect is the protective coloring that but for his jerky movements, he would usually remain undiscovered.

The dark brown back is streaked with lighter brown, the head and tail are light brown and the under parts grayish white. The bill is long and slightly curved. He is slightly less than six inches long and rather slim.

During the nesting season it is said they sing a dainty little song of five or six notes, wild, sweet and very tender, which I have not heard. Their accustomed haunt in summer is evergreen woods where there are stubs and dead trees, behind the loose bark of which the nest is placed. It is loosely made of twigs, bits of bark and moss, and sometimes with spiders' cocoons. The eggs, five to eight in number, are waxy white with fine brown spots on the larger end. They range in summer from Maine and Minnesota northward, farther south on the mountains, and winter from Maine southward.

Nuthatches. These birds are also creepers and climbers, but they do not use the tail feathers as a brace. Up and down they go, like acrobats, now running along the under side of a limb like a fly, now scrambling down the trunk, head first, in feats that would put to shame the most agile Woodpecker. These very active little workers receive the name Nuthatch from

the habit of placing a nut in a cranny or crevice of the bark and hatching it, *i. e.*, breaking it by striking with the bill, a process I have never witnessed. We have four varieties of this family in eastern North America, two of which are common.

White-breasted Nuthatch. This attractive bird is more often seen in the open during the fall and winter when he is common in parks, along the roadside, and about the farm, always on a tree. He, too, is social when not nesting, and is seen in company with Chickadees, Kinglets and Creepers, his presence made known by a nasal "*yank*, *yank*, *yank*," a peculiar and highly interesting sound, wholly unlike the notes of any other variety. This is the largest of our Nuthatches, slightly more than six inches long. Its distinct colors are rather attractive. The back is a fine slate blue, the top of the head and upper neck black; the dark slate wings are edged with black. The sides of the head and under parts are white with white markings on wings and tail.

They have long pointed bills, well suited for the careful inspection of the crevices of the rough bark where they find their food, worms, grubs, spiders, ants, beetles, and the eggs and larvæ of tree-infesting insects. Thus it will be seen that these little "circus birds" are very helpful to man, for they assist him in preserving his trees, whether of forest, orchard or lawn. They are always willing workers and never strike for higher pay. Does it not seem rather strange that man has not risen to a higher ap-

preciation of the valuable service of these constant helpers?

These birds are not so well equipped for wood cutting as are the Woodpeckers, and, in consequence, they often nest in the deserted holes of these carpenters; or they excavate their own chamber in a limb of some hardwood tree, so decayed as to make the work easy. The nest is made of fine bark, moss and feathers, a soft resting place for the five or six tiny white eggs. They are found in eastern North America from the Gulf to New Brunswick, and are generally resident throughout this territory, except in the northern portion.

Red-breasted Nuthatch. This Nuthatch has a more northerly range than his larger relative, and therefore is not a common bird in the Eastern States, except in winter. He is notably smaller, only about four and one-half inches long, and is easily told by his reddish brown breast and the white stripe over the eye. Otherwise his colors are much like those of the White-breasted. Their nesting and feeding habits are much the same, but the Red-breasted also enjoy the seeds of fir and spruce cones, which they skillfuly extract with their sharp bills; consequently they are seen about the evergreen forests where their highly nasal cries, "*yak, yak, yak,*" are much in evidence. They are noisy fellows and their drawling notes, if patiently followed up, will often lead one to the nest.

Their usual nesting haunts are the dark woods where they excavate for themselves a chamber

in some well decayed fir or spruce stub. They range in summer from Manitoba and Maine northward, wintering from northern United States southward. Mr. Knight says he has good reason to believe that these birds remain mated year after year, a very interesting fact, if true. Another little Nuthatch, known as the Brown-headed, is found in the South, particularly in the pine barrens of the Carolinas where I have often found them in winter. In color they are similar to the Red-breasted, except that the head is brown; their habits are much the same.

Tufted Titmouse. Classed in the same general family with the Nuthatches is another distinct sub-family, the Tits or Chickadees, of which we have four varieties in eastern North America. The Tufted Tit is a rather common bird, of general distribution in his range which is from northern New Jersey south to the Gulf States. He is easily known by the prominent tuft or crest which gives him his name, and his common notes, "*peto, peto, peto*" heard at all hours of the day. He also utters a "*de-de-de-de*" so much like the notes of his more northern cousin, the Chickadee, as to plainly indicate the relationship. In pose and movement this bird seems a miniature Blue Jay, but it is more given to sociability. In winter they are in flocks, and when insects are not to be had they feed upon nuts and seeds which they easily crack with their strong bills.

Their chief color is a pale ashy gray; the wings and tail are darker and the forehead is black. The under parts are whitish, washed

with brown on the sides. Like Nuthatches, they nest in deserted holes of Woodpeckers, rarely excavating their own chambers. Sometimes they nest in bird houses. They are about six and one-half inches in length. They are usually permanent residents throughout their range.

Chickadee. A very attractive little fellow in song, dress and habits is the friendly Chickadee, or Black-capped Titmouse. When the storms of winter have covered the earth in a heavy mantle of white and the chill winds blow drearily through the leafless trees, this hardy little citizen is much in evidence, for severe weather conditions seem to have no terrors for him. Then their sprightly notes are heard about the farmhouse and in the park; and so fearless are they that with little encouragement they will come close about your habitation.

In truth, with a little cultivation, Chickadees may be made so friendly and fearless that they will light upon hat or hand, even feeding upon a morsel held between the lips. Mr. Harold Baynes relates some most interesting experiences of this kind.

In winter you will come upon a band of Chickadees, merrily searching the trunk, branches, even the cones and needles of evergreens for the eggs and grubs of insects, which comprise their food. They, too, are excellent acrobats, climbing about like spiders, now clinging to the under side of a limb, now hanging, head downward, never stopping their work except to utter their happy "*chick-a-dee-dee-dee*," which so clearly

proclaims their identity that one never mistakes them. It often seems to me they cheer and encourage one another at their dreary work with their glad notes; and cheering they need, for their lot, constant labor in the chill atmosphere, is anything but an easy one. This same characteristic, however, one notes in all the tiny midgets that brave the region of our Northern winter. No wonder that Emerson said of him:

> "This scrap of valor just for play
> Fronts the north wind in waistcoat gray,
> As if to show my weak behavior."

Besides the usual notes which have determined the bird's name, it has a variety of trills and calls, all of which are pleasant sounds, some of them very pleasing. One is a sweet, plaintive little strain which I more often hear in the spring when the mating season approaches: "*s-w-e-e-t heart, swe-e-t heart*" of which Mr. Cheney says: " Never were purer tones heard on earth."

The dress of the Chickadee, like that of most northern dwellers, is rather fluffy, and although not brilliant in color it is really attractive. The most striking feature is the glossy black cap. The back is slaty gray, the tail darker. The chin is black, the throat and under parts whitish, the upper neck and cheeks snow white. It is slightly more than five inches long.

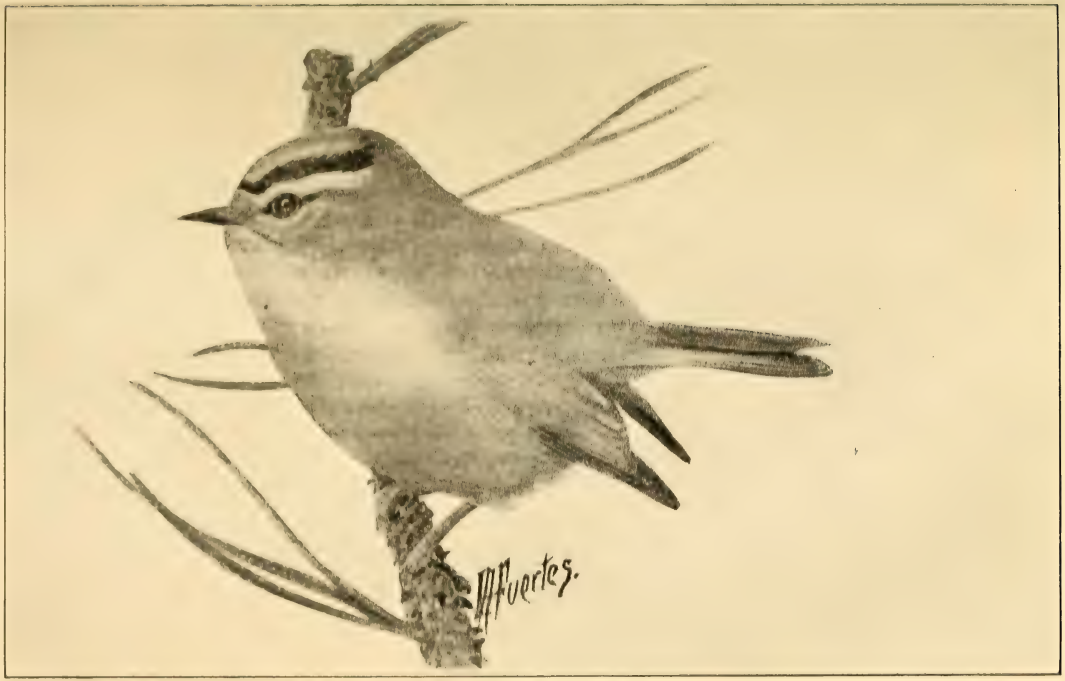
Chickadees nest in a hole either dug by themselves or cut by a Downy, often only a few feet above the ground. In such a chamber is built a nest of bits of birch bark, wood fibre and plant

down, lined with feathers, a safe place for the six to eight tiny white eggs spotted with brown. Last spring, one day while fishing in the Neversink, a Chickadee flew to a birch tree near me, with something white in his bill, which he quickly dropped and disappeared. In a moment, back he came similarly laden. This he repeated several times, and finally I traced him to a small maple stub where the pair were excavating a hole for the nest, not more than eighteen inches from the ground. The dead wood was all carried away, evidently in order that its presence about the stub should not betray the location of the nest.

Chickadees range in summer over eastern North America from Pennsylvania to Labrador. In winter they make a southern movement, but are permanent residents in New England and the Middle States where they are more numerous in the fall and winter. As they usually nest in the woods they are not often seen in the open until the young are grown.

Carolina Chickadee. A smaller variety, scarcely more than four inches long is called the Carolina Chickadee. They are much like the above in dress, with somewhat less white on the wings and tail. Their range is from southern New Jersey southward. In the pinelands of the Carolinas where I find them in winter, their habits in feeding seem much the same, but their "*chickadee*" notes are pitched higher and several of their calls are not uttered by the Black-cap.

Hudsonian Chickadee. From northern Maine northward there is found, usually in dense woods, another member of this family known



GOLDEN-CROWNED KINGLET

as the Hudsonian Chickadee. They differ in plumage from our common Chickadee in having a brown cap, and brown on the sides, with a brownish tinge on the back. They are about the same in length and their notes are somewhat similar in quality, particularly the "*dee-dee-dock*" they utter as they feed. I find them in the region about the Pleasant River in the Maine woods, and about Mt. Katahdin.

Golden-crowned Kinglet. In fall or winter, when making your way among evergreen trees, whether it be in park or forest lands, you will at times hear high-pitched, wiry sounds, so fine that they seem to come from some insect that has escaped the clutches of Jack Frost. If you are not in a hurry and will take pains to follow up these shrill notes, you will find well up in the branches of the evergreens, flitting and darting about in a manner not unlike Warblers in summer, tiny birds with bright-colored crowns, that are always on the move. These are the Kinglets, two winter visitors that belong to a family quite distinct from the Chickadees and Nuthatches, yet are often found in their company. The more common of these midgets is the Golden-crowned, so named from the patch of bright yellow on its crown. The upper parts are olive-green, with dusky wings and tail. On each side of the crown patch are black lines, and there is a whitish line over the eye. The under parts are grayish white.

These tiny sprites are scarcely more than four inches long, one of the smallest of our birds. They are unafraid, and seem engaged in a

never ending search for food. That such small creatures can withstand the terrible cold of a northern winter is one of the unexplained mysteries of Nature. Yet they work away in the biting cold, apparently as happy as Chickadees, now examining the bark at the foot of a tree, now among its limbs, clinging to the tips of the branches like Chickadees, but even more restless and hurried. So rapidly do they move about, one needs to be very alert to catch a glimpse of their bright crowns through the glasses.

The notes of the Golden-crowned Kinglet are, as we have seen, shrill and wiry, "*tse*, *tse*, *tse*, *ti*, *ti*, *ti*," not highly musical but very welcome in the season so barren of bird song. They nest from northern New England northward, usually in the evergreen forest. The nest, a well built and exceedingly beautiful structure, is made of fine bark, rootlets and moss, lined with feathers. It is usually placed high above the ground, and is pensile or semi-pensile. The tiny eggs, eight to ten in number, are creamy white, spotted and blotched with brown. The summer range of the Golden-crowned is from northern United States to Labrador, and southward along the Appalachian and Rocky Mountains. It winters from the southern portion of its breeding range south to Central America.

Ruby-crowned Kinglet. The general appearance of this bird is so much like its cousin that I am never sure of its identity unless I can see its bright red crown or the two whitish wing bars. Otherwise its colors are much like the

Golden-crowned, and it is slightly larger. But if you can hear its song in the springtime there will be no doubt of its identity, for the vocal performance is all its own. Never shall I forget that spring morning in early May when I first heard this wild, sweet song. At an early hour as I was making my way across an old pasture toward a patch of dense woods in quest of birds, there came to me far across the open, from a dense beech and birch growth at the edge of the forest, a thrilling, beautiful song, wholly strange to my ear, "*cher'-o-wee, cher'-o-wee, cher'-o-wee,*" loud, full, and clear. Hastening in the direction of the song I searched a long time for the performer but finally found him, seeing through the glasses even his splendid red crown. Though it was several years ago, that morning stands out distinctly in memory. These Kinglets also have fine, wiry call notes, not unlike those of the Golden-crowned.

The feeding and nesting habits of this variety are much the same as with the preceding. Their summer range is rather farther north, but a few nest in Maine. In winter they range from North Carolina southward. I have never found them during the migration so common as the Golden-crowned, and I am inclined to believe they are not so numerous.

Blue Jay. A winter wanderer of great prominence because of his gaudy colors and vociferous cries is the Blue Jay. He belongs to the same family as the Crows, a group of birds found in all parts of the world except New Zealand. The Blue Jay is an excellent example of

the truth of the old adage, "fine feathers do not make fine birds"; for notwithstanding his handsome suit, one of the most strikingly beautiful of the bird world, he seems to be bad at heart, often bent on mischief that has a tragic ending.

During nesting time, like Crows, they are strangely silent birds, especially in the vicinity of their nests, which I find more commonly among evergreen trees. At that season, scarcely a sound do you hear, and if you invade their precincts you merely catch glimpses of them as they silently steal about the treetops. But if you venture near their nest then will your presence be proclaimed in terms loud and emphatic, and if you persist, they will dash at you with a harsh "*w-a-a, w-a-a,*" almost striking you with their beaks.

When the nesting is over and the young grown large enough to join in the mischief, Mr. Jay is a very different fellow, although he is probably just the same at heart. Now he is the alarmist of the woods, the sentinel on the watch to notify all the denizens of the neighborhood of the approach of danger, be it man, Hawk, Owl, or any one of the numerous marauders in fur. His harsh "*jay, jay, jay*" is far reaching, and many a still hunter on the trail of a fat buck has muttered imprecations at this noisy fellow who so plainly told the deer of impending danger that he fled the country in great haste, relying implicitly upon the information conveyed in the Jay's message.

It is the question of food that leads the Blue Jay into trouble and gives him a bad name.

Not satisfied with a diet of mice, shrews, bugs of various kinds, berries, grain, nuts, etc., they eat the eggs and nestlings of other birds, even killing the parents if they offer too strenuous objection to these depredations. The truth is they are natural thieves and marauders.

The vocabulary of the Blue Jay is an extensive one, and not only do they voice their own characteristic calls, but they closely imitate other birds, especially the Red-shouldered and Red-winged Hawks, Catbird, etc. Sometimes you will hear a tremendous row in the woods, with just enough intelligible Jay talk to give them away. Follow up the din, and you will find a pack of Jays mobbing an Owl, harassing the poor creature whose eyesight is defective in daytime, till he is quite beside himself. But when he alights and faces his tormentors they keep beyond the reach of his well armed feet and bill. Owl baiting is a favorite amusement with these feathered bullies.

The plumage of the Blue Jay is grayish blue above, dusky white below. The wings and tail are bright blue with black bars, many feathers having white tips. The prominent crest is blue and there is a black stripe somewhat irregular in form extending from the back of the head down the sides of the neck and across the breast. The bill and legs are black. This bird is a foot long. The nest is made of sticks well woven together, and is placed some distance from the ground. The very pretty eggs are pale green, thickly mottled with brown. Their range extends from Florida to Newfoundland and they are

generally common throughout as permanent residents.

Canada Jay. A very interesting bird common enough in the great woods of the Northern States and Canada, but practically unknown in the open country, is the Canada Jay. Among the lumbermen who know him intimately he is called by a variety of names, Moose Bird, Meat Hawk and Whiskey Jack being the most common. When hunting big game in the deep wilderness, you may travel for days without seeing one of these birds; but no sooner have you killed a deer or moose and begun to dress the carcass than they appear to you as though they had been following you closely, waiting for a successful issue to your quest. One wonders at their sudden appearance on silent wing, and no less remarkable is their utter fearlessness. So close do they come and so insistent are they in their efforts to share with you the spoils of the hunt that they seem impertinent, and almost stupid.

The explanation of their unusual boldness is probably found in the fact that being dwellers in the thick woods, away from the haunts of man, like the Grouse of the same locality, they have not as yet suffered greatly at his hands, and consequently have not developed fear of him. It is rather a sad commentary upon the attitude of man toward the feathered creatures that, without doubt, did the Canada Jay live in the open country, he would become in a short time as shy and fearful as the great majority of our familiar birds.

The food of the Canada Jay is everything in the line of meat that may be found around the camps of hunters and lumbermen, even candles, salt pork and soap being quite within the range of their appetites. They eat bird's eggs, young birds, mice, and other rodents, in fact practically everything in the animal kingdom they may lay bill to, besides acorns and beechnuts. Notwithstanding their omniverous appetites, it is still a deep mystery to me how these birds can secure enough food of any kind to sustain life in the terrible cold of the six-months-long winter. And when we consider that they nest in early March and their young are reared while yet the cruel grip of the Arctic cold is unbroken, the mystery becomes even greater. The answer to this problem will come on closer acquaintance with their nesting habits, to be gained only by some trained observer who has the hardihood to brave the region of the north woods at that forbidding season. Perhaps the memory of gaunt hunger unsatisfied, has led to one peculiar habit of this bird, the storing for future use of any kind of food it chances upon in excess of its immediate needs.

The Canada Jay has rather a fluffy appearance, due to the thick coat of feathers it wears. It is slightly longer than the Blue Jay and the colors are much less conspicuous. The back is slate gray. The back of the head and nape of the neck are jet black, the throat, breast and forehead white. The gray feathers of the wings and tail are tipped with white. They have a variety of harsh calls, the most common of

which is a disagreeable "*ca-ca-ca.*" The roughly built nest of bark, twigs and moss is usually placed in a thick-topped spruce or fir tree, some distance from the ground. The eggs are usually four in number, grayish, spotted and splashed with brown and slate colors. They are permanent residents throughout their range.

Common Crow. There are few birds about which public opinion has been so much at variance as the Common Crow. Formerly farmers almost universally condemned him as the greatest of mischief makers, an unmitigated nuisance, because of his persistent pulling of sprouting corn and other seeds in spring, and the destruction he worked in the corn and potato fields and in the garden in fall. Among the farmers of my acquaintance there has been a great change of sentiment in recent years toward this sombre-hued bird for two reasons. It has been learned that by soaking the seed corn, peas, etc., in a solution of tar water, or any one of several chemicals, they are rendered so unpalatable that Mr. Crow never repeats the performance. Farmers have also learned through various sources, chiefly from information sent out by the Department of Agriculture at Washington, that the crow is a very valuable adjunct to their labors because of the great number of pests he destroys, mice, June bugs and their larvæ, cutworms, grasshoppers, potato bugs, etc., thereby adding substantially to the bounty of the crops.

To be sure, Crows still work more or less damage, particularly in the fall, and they destroy the eggs and young of various song

AMERICAN CROW

birds; but striking a balance between the good and evil wrought, they will be found to be real friends, whose presence, after all, is of material advantage to the farmer.

Entirely apart from the utilitarian view is the sentimental side of the Crow's case. Personally I have found him a very interesting and profitable object for observation and close study. They seem to know a great deal about man's ways and habits of thought, particularly where their own safety is concerned. If, gun in hand, you approach a flock of Crows busily feeding in the field, the sentinel (there is always one posted on some prominent lookout) will give the alarm and away will go the whole band long before you are within gun shot. Leave the gun behind and you can get so near you can almost hit them with stones or a stick. Riding or driving along a country road, you can approach within a few rods, especially in the spring when they first put in an appearance. Usually noisy enough, when on mischief bent and in the neighborhood of their nests, they are silence itself. But let a band chance upon an Owl, bewildered by the daylight, they proceed at once to mob him, raising a clamor that is heard a mile away. Crow ways are mysterious, perhaps past man's finding out, but I know of no bird that promises more in the way of variety and the unexpected in its traits, so that the student will find in this many-sided bird much that will repay close and protracted observation.

Crows usually mate in March, and in April is built the nest of coarse sticks lined with moss

and feathers, usually in the thick top of a tall evergreen tree in deep woods. The handsome, mottled, green and brown eggs are usually five or six in number. The dress of the Crow is jet black, even to the feet, legs and bill. He is a walking bird, with an expression of independence in his gait that is quite amusing. In my boyhood they were the first comers of the bird army, a herald of the spring whose appearance we eagerly looked for. At that season their fine black coats were really attractive on the bare brown patches where the snow had melted. I have a real affection for the Crow and should sadly miss him, particularly in fall and spring.

Chapter XI

THRASHERS AND WRENS

Catbird, Thrasher, Mockingbird, Wrens

"Tragic, comic actor thou,
For thy stage an alder bough;
Now some borrowed joyous note
Pouring from thy feigning throat.
Now from wailing puss in sorrow,
Her alarm cry thou dost borrow."
—*The Catbird*, M. J. Savage.

This family is composed of two subdivisions, Thrashers and Wrens, quite unlike in nearly all respects. The former is a numerous American group, while the Wrens are well represented in the Old World. Among the Thrashers are some of our best singers, as the Catbird and Mockingbird. Some of the Wrens, too, are very musical; but the family as a whole is noted for being nervous and excitable and giving utterance to their bad tempers in rather harsh, scolding notes. They are very interesting birds and both groups will well repay careful study.

Catbird. This is the northern Mockingbird, and while less famed for his skill as a vocalist than his cousin of the south, yet at his best he is one of our most delightful performers. The Catbird is rather an anomaly, a sort of Dr. Jekyll and Mr. Hyde among birds. One can scarcely imagine a more disagreeable sound than

the catcall of this bird when he is disturbed, even in the slightest degree. You feel like hurling something at him that will send him beyond ear shot and you are quite disgusted with him. But if you curb your impatience and, calming your ruffled feelings, remain quiet for a time in the thicket where his nest is, he will forget your presence and you will be quite charmed with his performance.

His lay is rather low, but melodious, and some of his notes are exceedingly fine. You may think there is a lack of spirit about it, as though the bird were not prompted to sing so much from the joyousness of his heart as from a desire to have some part in the chorus about him. His song is a strange mixture of the notes, calls and songs of other birds, rendered in his own, inimitable way. He is a very successful mocker, reproducing the notes of Thrush, Sparrow, Wren, or Warbler in so perfect a manner as to quite deceive one for the instant. But listen a moment longer and he gives himself away, for, after all, he has an individuality all his own which he cannot long conceal. And when it is over you wonder what it was all about, for there seems to be a lack of theme, of motif, as it were; yet there are parts which are so wild and sweet as to quite delight one.

The Catbird is a citizen of the garden, the shrubbery of the parks, and the alder and hazel bushes that overgrow the river bank. When I wish to spend an hour in his society I quietly paddle along the shore close to the bushes, and I always find him. In June his nest is found

this way; later the young will be seen skulking about the thick tangle, rather nervous at your approach.

He is a sleek, well groomed bird, giving one the impression of bathing frequently and spending much time in arranging his attractive dress. Attractive it is, although just a plain slate color, trimmed with black on the crown and tail. The under parts are slaty gray and under the tail there is a chestnut patch. The long tail, usually held at a smart angle, he makes good use of, flourishing it to express his varying emotions much as a speaker does his arms, or a lady her fan. They are tame birds, even inclined to be friendly, and a little encouragement will bring them close about the house, even to the veranda, for tempting morsels.

In my experience, Catbirds are associated with the river banks, where I find several nests each season. The nest, set in thick bushes, is made of rather coarse twigs, grass and leaves, well interwoven. The eggs, five or six in number, are a beautiful bluish green in color. The parents display a care and solicitude for their young that is not exceeded in any of our birds. Perhaps the alarm felt at the approach of danger is in proportion to the intensity of their parental love; hence the emphasis of their squalling notes. They nest as far north as southern Canada and winter from Florida southward. They arrive toward the end of April.

Brown Thrasher. The Brown Thrasher, or Brown Thrush, as he is more commonly but erroneously called, is quite the opposite to the

Catbird in his song and habits, as well as in dress. The latter, as we have seen, sings from the midst of the tangled thicket about his nest, and in low tones. The Thrasher is impelled by no such feeling of modesty. From the topmost limb of the tallest tree, he pours out his wonderful lay, and he repeats it to make sure that you do not miss a single note.

> "That's the wise Thrush; he sings each song twice over,
> Lest you should think he never could recapture
> The first fine careless rapture!"

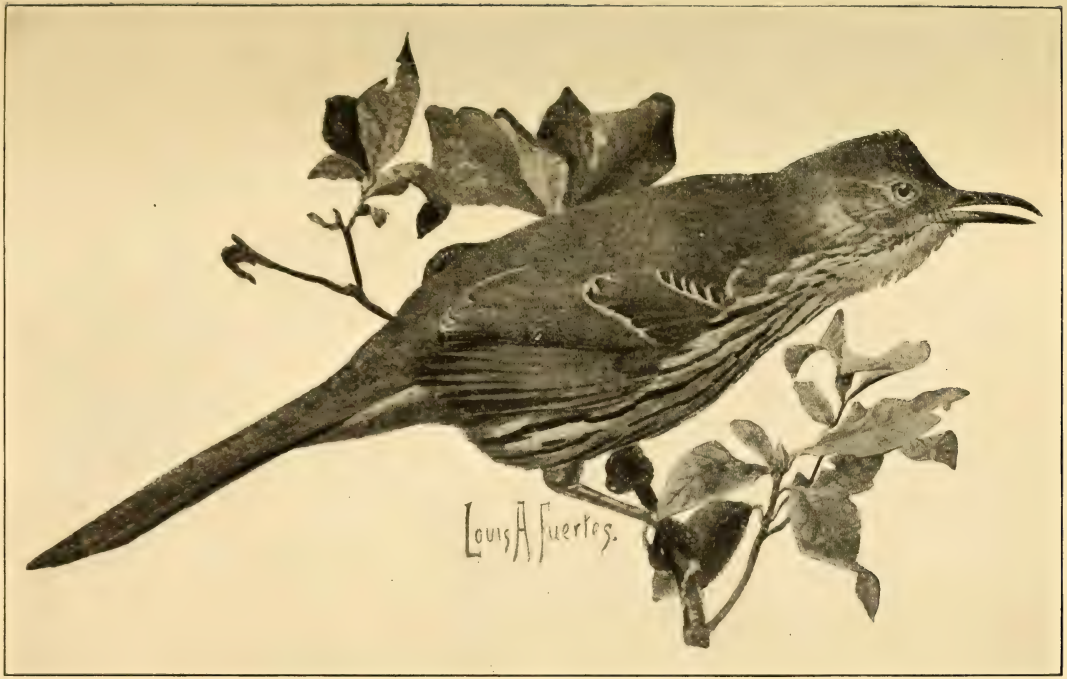
sang the poet, and the thought is very suggestive of the manner of this bold performer. Some interpret the Thrasher's song as a bit of excellent advice to the farmer:

> "Shuck it, shuck it; sow it, sow it;
> Plough it, plough it; hoe it, hoe it!"

These words suit well the measures of his notes.

There is much about the song that will remind you of the Catbird, but the Thrasher, as we have seen, repeats his notes. There is a common belief that the Thrasher, too, is a mocker, but this is a false impression, so far as I have observed. To me, his song seems quite his own, with a similarity in several particulars to the notes of other singers and yet wholly characteristic. When singing the bird seems fully absorbed in the effort, as though filled with emotion which demands expression through his vocal capabilities.

Although so conspicuous when singing, the Brown Thrasher is rather a shy bird at other



BROWN THRASHER

times. You will catch a glimpse of his fine brown dress as he dives from his song perch into the thicket, or as he darts in and out, close to the ground, in the alder and hazel tangle where he nests. He seems rather restless and easily alarmed, indicating his dislike for your presence by a loud "*smack*," which is the most emphatic alarm note I hear among song birds. If you quietly enter his bush-grown bower you may see him hopping and running about on the ground, flirting and flourishing his very prominent tail, like a Wren, as he searches for grubs, beetles and other insects, which, in the early part of the summer, constitute a large part of his food. Later he enjoys a change of food, preferring cherries, berries and many wild fruits.

They build, on or near the ground, a bulky nest of twigs, leaves and bark, lined with fine rootlets. The four or five eggs are white, thickly and evenly sprinkled with cinnamon-brown. The Brown Thrasher is about a foot long and is a very handsome bird. The upper parts of his dress are beautiful cinnamon-brown; the under parts are white, heavily spotted and streaked with dark brown, except at the throat and middle of the belly. The tail is long, wide, and drooping when singing. The eyes are yellow, the bill long and slightly curved. They range in summer over eastern North America as far north as Montreal and Manitoba, and winter from North Carolina, southward.

Mockingbird. This wonderful singer holds the same place in the hearts of those people who have had the good fortune to live within its

zone of song as the Hermit holds in the hearts of New Englanders. Writers of prose and poetry have exhausted their vocabularies in the effort to do full justice to this master of song; but words fail to convey an adequate impression of his utterances. Many years ago, one day when driving in Virginia from Williamsburg to the site of old Jamestown, in passing through a patch of second growth, I heard a song that instantly arrested my attention. Immediately I knew it for the song of the Mockingbird; for there is in its varied notes much of the quality that characterizes all the members of this family, although its range is all its own. The songs of many birds are drawn upon, but the style is much like the Thrasher, and the effect is most delightful. From all I have heard and read about the Mockingbird's song, I conclude that to realize the full effect of its wonderful expression, one should hear it in the misty moonlight when the peach trees are in blossom. Under these conditions it must be entrancing.

Often I have met these birds during the winter season, but then they are for the most part silent, and their call notes when heard are almost as harsh as those of the Catbird. When perched, in appearance they are much like the Loggerhead Shrike, but they are not nearly so sleek, and the tail is longer and more drooping. The upper parts are ashy gray, the wings and tail blackish. There is considerable white on the wing coverts, and the tail feathers and under parts are whitish. They are about ten and one-half inches in length.

The nest of twigs and grass, lined with hair, rootlets, cotton, etc., is placed in a low bush of thicket or hedgerow, often in the shrubbery of the lawn. The eggs are pale blue or green, spotted and blotched with brown. So tame are these birds that they are about the street, parks, and lawns of Southern cities, and on the plantation they are as friendly and trustful as the Robins in the North. They are usually permanent residents except in the extreme northern portion of their wide range, which extends from Mexico to Illinois and northern New Jersey, even to Maine as accidental visitors. They winter from Virginia southward.

Carolina Wren. This, the largest of our Wrens, is usually a Southern dweller, as the name implies, that sometimes ventures northward even to Maine. They are found nesting in southern New England, but only rarely. In the Southern States they are permanent residents, and very welcome little neighbors they make, for they are one of the very few families that sing all winter, and their song is quite meritorious. I have found them in the winter about the farm buildings, even under the veranda and about the woodpile, where they hail the sunrise with their tuneful "*whee-udel, whee-udel, whee-udel.*" This little minstrel is an all-day singer, but he is by no means confined to a single lay, for his repertoire includes a variety of tunes, whistles and calls that have caused him to be called the Mocking Wren, although he is probably not a true mocker.

Like all his family, he is a restless sprite,

dodging in and out of holes, cracks and crevices of rocks and logs in the woods, where he usually dwells. He comes about the homes of man more commonly in winter.

The Carolina Wren is rather an attractive bird in dress, with upper parts rufous, the wing and tail feathers finely barred with black. There is a whitish line over the eye and whitish spots on the wings. The under parts are creamy buff, lighter on the throat. This Wren is five and one-half inches long.

The nest is placed in an old log, stump, woodpile or brush heap. It is made of grass, leaves and twigs, and lined with rootlets, fine grass, etc. The eggs, four to six in number, are creamy white with fine brown spots. The Carolina Wren nests from the Gulf States to northern Illinois and southern Connecticut.

House Wren. This little bird is a pronounced lover of man, for in the East, at least, it is almost always found nesting in his immediate vicinity. I have never known of this bird as a woods dweller, although its cousin, the Winter Wren, as we shall see, is always an inhabitant of the forest. The House Wren comes close about you, preferring to occupy a cozy little bird-house you have erected for it. But in the absence of so convenient a place, he will be content with a tin can, crevice in a building, hole in a fence rail or log, a beam under the veranda, an old shoe, or the pocket of a garment. In fact any place will do that meets the bird's notion of safety. Once well located, they will return year after year, inclining one to the

belief that they remain permanently mated.

This Wren sings at its work. Whether house building, house cleaning, or tending the nestlings, its jolly song may be heard as though labor were a constant delight. But sweet tempered as he usually is, he is easily disturbed and becomes a little shrew, scolding angrily. This happens when Jay, Cowbird, or other neighbor in feathers, or squirrel, becomes too neighborly.

The song of the House Wren is very sweet and tender, sung with a zest which completely dominates the tiny creature. It is heard throughout the day, interrupted frequently by household cares and love making, for they are very affectionate midgets. Much time is also spent in policing the immediate vicinity of their home, for they are jealous guardians of what seems to them to be their exclusive domains.

The bulky nest is made of twigs and grass. The eggs are six to eight in number, creamy white, spotted with brown. Their plumage is dark brown above, minutely barred with blackish. The under parts are gray with brownish washings. The tail is erect, the bill rather long and sharp. They range locally in summer as far north as Manitoba and Maine, wintering from South Carolina southward. It seems the increase of English Sparrows has driven the House Wren from many of its former haunts.

Winter Wren. This tiny woods sprite I have not had the good fortune to see during the spring migration. In the great woods of northern Maine we find them common enough when we go there on our annual fishing trip in midsum-

mer. It is not quite easy for one living in New England to see why they are called Winter Wrens, as that is the season when they are not in evidence. But in the Middle States they spend the season of cold, so perhaps from that viewpoint they are correctly named.

This Wren has a pretty suit of brown, finely barred with black on the wings and tail, with concealed light spots. The under parts are light washed with brownish, the sides and breast somewhat barred with black. The tail is erect, giving the bird the appearance of being much shorter than he really is, and his entire length from tip of bill to end of tail feathers is but a trifle more than four inches.

The Winter Wren is a very pert and active bird, darting like a huge bee in and out the brush heaps, stopping to look at you, with a queer little bobbing motion, as though his legs were coiled steel wire. If you chance upon his large family when they are first out of the nest, your amusement will be great. Last year we saw them rowed along a mossy log, tended by the parents, who were evidently giving them their first lesson in woodcraft. They watched us for some time, bobbing all the while on their tiny legs, then slipped away into the moss and leaves, evidently thinking us suspicious characters to be avoided.

The nest is built of small twigs and moss, lined with feathers, usually placed in an old stump, in the moss at the foot of a tree, or perhaps in a brush heap. The four to ten eggs, scarcely larger than peas, are creamy white speckled with reddish brown.

LONG-BILLED MARSH WREN

Interesting as the Winter Wren is in plumage and habits, it is as a singer that he is known to fame, for his song is one of the great delights that comes to one in the wilderness. It is wild, rich, tinkling, a mountain rill. Thoreau says of one he heard in the Franconia Notch: "It was surprising for its steady and uninterrupted flow, for when one stopped, another took up the strain. It reminded me of a fine, corkscrew stream, issuing with incessant lisping tinkle from a cork, flowing rapidly; and I said he had pulled out the spile and left it running. That was the rhythm, but with a sharper tinkle, of course." I sometimes hear him called the "fiddlin' bird," and think the name very appropriate. They nest from the Northern States northward, and along the Alleghenies, wintering from New England to Florida.

Long-billed Marsh Wren. In swamps that are overgrown with reeds, and in the cat-tails that border marsh, lake and stream, you will find in the summertime a little Wren, whose acquaintance you will not make unless you visit his haunts, for he seldom ventures forth except during migration. This is the Long-billed Marsh Wren, as much a part of the marsh he inhabits as the reeds and rushes themselves. When you undertake to pay him a friendly visit, the chances are that you will be greeted by harsh "*cacks*" that indicate ill humor at being disturbed. But if you compose yourself in patience for a time, the ill temper disappears, and you may hear his quaint song, a bubbling, tremulous little melody, that reminds

you of the lay of his cousin, the House Wren. It is rather wild and a trifle harsh, but, withal, pleasing.

The nesting habits of this nervous midget are exceedingly interesting. They build a globe-shaped structure of grass and rushes, attached to reeds or bushes, with the entrance at the side like the opening of a pocket. But this restless creature does not stop with building a single nest, although it can occupy but one. It seems that its uncurbed energies compel constant activity, and the male goes on building other nests, sometimes a half dozen or more, while his mate is hatching the brood. The reason for this has occasioned much speculation among ornithologists and scientists, the generally accepted theory being that the extra nests are built as a means of protection to the sitting mate, as the number lessens the chances that an enemy will find the real home. This is a very interesting explanation, but I can but doubt the ability of these birds to reason so far.

This is a plainly dressed Wren. The crown is olive-brown, with a white line over the eye. The black back is streaked with white, and the dark wings and tail are barred with brown. The under parts are white, washed with brown on the sides. The bill is long and slightly curved. They range in summer from the Gulf to central New England, wintering from Florida southward. They are slightly more than five inches long.

Short-billed Marsh Wren. This Wren also inhabits marshes and meadows overgrown with

coarse grass. They are usually found with difficulty, as they have a way of skulking in the grass and sedges, rarely appearing, but indicating their presence by their sharp calls, which Mr. Thompson says sound like the noise made by striking two pebbles together. The song is described by Nuttall as a "lively and quaint song, '*tsh, tship, a-day, day, day, day,*' delivered in haste and earnestly, at short intervals, either when he is mounted on a tuft of sedge or while perching on some low bush near the skirt of the marsh."

This, too, is a very small Wren, scarcely more than four inches long. The upper parts are streaked black, brown and buff, the wings and tail being somewhat barred. The under parts are white, tinged with light brown on the breast and sides. They breed as far north as Massachusetts, and winter from the Gulf States southward. This bird is also said to build extra nests as does the Long-billed, and its nesting habits are very similar.

Chapter XII

WOOD WARBLERS

"While May bedecks the naked trees
With tassels and embroideries,
And many blue-eyed violets beam
Along the edges of the stream,
I hear a voice that seems to say,
Now near at hand, now far away,
'Witchery-witchery-witchery!'"

"*The Maryland Yellow Throat*"— Henry van Dyke.

The Wood Warblers belong to an exclusively American family, numbering in all, according to Mr. Chapman, about one hundred and fifty-five species, some seventy of which visit the United States. All these, however, are not found in any one locality during the nesting season, but they are scattered over the whole country, reaching far north into Canada, even to Alaska. After the young are reared they withdraw to the Southern States or beyond our southern border, except for a few varieties, of which scattering members even brave the rigors of the northern winter. These few individuals subsist during the winter months upon berries, but the great army of Warblers are almost exclusively insect feeders, and so pass well below the frost region, where they may be sure of a constant food supply.

Many Warblers are late arrivals in spring,

the great army appearing only after the weather is well settled and the season of warm days is here. They leave as soon as the young are grown, some even in early August.

For some time I have been watching three families in the near-by woods beyond the Cove, the Black-throated Blue, the Black-throated Green, and the Black and White Warbler. Yesterday, the fifth of August, I visited their nesting haunts to find them absent. Not a Warbler note did I hear, or feather did I see, where a few days ago the thicket seemed alive with them. No doubt they have already begun their migration which will for a time be made by very easy stages, as there will be little occasion for haste to escape the cold winter.

As a family Warblers are rather delicate creatures, ill fitted to withstand the vicissitudes of our changing climate; and the wonder is how so many make the long migration without even greater mortality among their numbers. There are many varieties that travel five thousand miles between their summer and winter homes; and it is said the Black Poll, nesting in Alaska, travels seven thousand five hundred miles to its winter haunts in South America. No doubt vast numbers meet untimely deaths on their long journeys, but a goodly number survive, bringing much of interest to our summer woods.

Warblers are usually woods-dwellers, where we must seek them if we would make their acquaintance. They are restless as Wrens, and being flycatchers, are constantly darting about picking up the tiny tidbits of the air. They are

very difficult little creatures to study through a glass, and much patience must be exercised if one is to know them. But the reward is well worth the effort, for they are among our most attractive birds in plumage and nesting habits, and while as a family they are not renowned for vocal ability, yet many have very pleasant notes, a few, songs of much merit. They present a variety of colors that are brilliant and often fantastic in arrangement.

Warblers differ much in feeding habits. Besides catching insects, some patiently search the cracks and crevices of tree trunks and carefully inspect both sides of the leaves in a most painstaking and persistent manner. Some are frequently seen on the ground searching for grubs among the leaves, and a few varieties, at certain seasons, feed upon berries and fruit.

The Warbler family is one of the most numerous in summer, and it is perhaps safe to say one-half the birds we find in the woods are members thereof.

The fact of their keeping pretty close to the woods, together with their small size and inconspicuous notes, accounts for their being so little known. They are at once the joy and the despair of the bird student, and to know even a few varieties is well worth while. Yet if one begins in early spring, when the hardier varieties arrive, and works patiently for a season as opportunity offers, a goodly number of interesting acquaintances may be made. During the migration, before the trees are in full foliage, is an excellent time to study Warblers. They

are then in evidence in city parks and about the lawn, wherever shelter and food are to be had. About thirty-five varieties may be found in the north during the spring and summer; in some localities a few more. Of these we shall consider about twenty of the more common ones.

Myrtle Warbler. One of the first Warblers to put in an appearance in April is the Myrtle, one of the most common of the family, as well as one of the hardiest. He is rather gayly dressed and may be easily distinguished by the four distinct patches of yellow, on either side of the breast, on the rump, and crown. Otherwise the upper parts of the male are bluish gray, streaked with black. The under parts are light, and, except the throat, heavily streaked with black. There are two distinct wing bars of white, and the outer tail feathers are dashed with white. The dress of the female is similar, with a faint wash of brown above and less black on the under parts. In the fall, both show much less yellow, sometimes only the patch on the rump being visible.

This is a bold Warbler, often seen in the open country in company with others more timid, who seem to seek his protection. I find them in the dense woods in nesting time, but as soon as the young can travel they move about the open country in family parties, often visiting lawn and garden. They come to our premises frequently where they flit in and out among the fruit and shade trees, deftly snapping up passing insects and clinging to the tree trunks like creepers, sometimes resting on the ground.

In spring and summer the food of Myrtle Warblers is insects and the eggs and larvæ of insects; but with the advancing season, they change to a diet of berries of the Virginia creeper, dogwood, seeds of the alder, and bay or myrtle-berries. From this habit arises the bird's name. Their love for this vegetable diet makes it possible for some of the more vigorous individuals to winter farther north than any other Warbler. They are said to sometimes remain all winter in Massachusetts where bayberries abound. In the vicinity of New York I have found them in a tangle of catbrier and poison ivy in December. They breed from northern New England northward, and, as a rule, winter from the Middle States southward to Mexico and Panama.

Myrtle Warblers usually build in evergreen trees, a nest of twigs and grass, with a lining of hair, feathers or rootlets. The eggs are four or five in number, grayish white, thickly speckled with brown. This is one of the largest Warblers, nearly six inches in length.

Yellow Palm Warbler. A dainty little Warbler that may be expected in the vicinity of New York by mid-April, is the Yellow Palm. They, too, winter in the near South, usually in the Gulf States, so their spring journey is much shorter than with those wintering in the far tropics. During migration this is a bird of the open country, parks, fields and roadside, with little liking for dense foliage of either lawn or forest. They are friendly, trustful little creatures that often come close about the buildings in search of food, for they arrive at a time

when the food question is rather a difficult one to solve, especially since they are not seed eaters at this season of the year.

Their nesting grounds are to the north, and they are seen in the Northern and Middle States only during migration, except in northern Maine. But while journeying northward they are numerous, and often are in the company of Myrtles. They are restless little fellows, now darting into the air to snap up a fly, now walking sedately about the fields in search of tiny insects and grubs hidden in the grass, but always with a lifting motion to the tail which becomes very monotonous to the observer, if not tiresome to the bird itself. Their note of alarm is a sharp "*chip, chip,*" their usual call note a fainter, rather lisping "*tchip.*" The song heard on the nesting ground is a daintily warbled "*tsee, tsee, tsee, tsee, tsee, tsee, tsee,*" a simple but characteristic strain.

The name suggests the chief color of the bird, for the under parts are bright yellow with fine lines of brown on the sides of the throat. A streak over the eye and the eye ring are yellow. The back is brownish olive-green, brighter on the rump. The wings and tail are clove brown. The outer tail feathers are dashed with white, plainly seen as the bird moves about. The Yellow Palm is a small bird, less than five and one-half inches long. Their nesting habits have been observed by few persons in Maine. Mr. Knight found them nesting on the ground at the foot of a tree in a moss-covered bog. The nests were built of fine grass and sedges, lined

with feathers or hair. The five eggs were a roseate white, spotted and blotched with brown.

Black and White Warbler. This Warbler could scarcely have borne another name, for black and white are his colors, with no trace of another tint. His dress is really very neat, the coal black being streaked and dashed with pure white. The female is washed with brownish on the sides and there is less black on the under parts; otherwise the colors of her plumage are the same. If we add the word creeping to the name of this bird, its identity is complete, for it is almost as much a creeper as the Nuthatch or Brown Creeper. Their arrival is simultaneous with the Yellow Palm, and they are found wherever there are trees. About the shade trees and parks of the city, by the roadside, on the lawn, and in the forest and orchard, they busily search for their daily supply of bugs, gnats, spiders, grubs and eggs of various insects. They, too, are restless, but are more easily observed than other Warblers, which feed exclusively on insects caught on the wing, for they move more sedately and doggedly. As they work I often hear a fine, wiry call note, "*dze*, *dze*, *dze*," and at times the bird stops to sing a shrill "*weé-see*, *weé-see*, *weé-see*, *weé-see*," not particularly musical.

These Warblers are common summer residents in the New England States, usually nesting in second-growth, deciduous woods. The nest of bark and grass is lined with hair and tiny rootlets, and always placed on the ground by the side of a stump or log, under a bush, or

on a hummock. The eggs are pure white, prettily spotted with brown. The range of the Black and White Warbler in summer is local over eastern North America from Pennsylvania northward to the latitude of Hudson Bay. They winter from northern Florida southward. They are slightly more than six inches in length.

Pine Warbler. Often in late April we find associated in migration with the Yellow Palms and Myrtles the Pine Warbler, so named because of its liking for pine trees. You will be attracted by rather faint notes, which sound like the utterances of the Chipping Sparrow and yet are sufficiently characteristic so that you will not confuse the two birds. Some observers also liken its song to that of the Field Sparrow, but I have not observed the likeness. The notes are clear and sweet, a simple strain. Many of these birds winter in the United States, even as far north as North Carolina, a fact which accounts for their early appearance in spring.

In the breeding season the Pine Warbler is closely associated with evergreen forests, especially the pine; therefore, its range is much limited. They build in these trees, usually on a horizontal line high above the ground, a compact nest of bark, weeds, leaves, etc., lined with feathers and hair. The four or five eggs are white with cinnamon spots.

As they usually live amid the dense foliage of the pine they are rather difficult birds to observe. They are restive and busy, now clinging to a thick cluster of needles, now moving like a creeper along bough or trunk in the never end-

ing search for the tiny insects which largely comprise their food. It is sometimes called the Pine Creeping Warbler, but it is not a true creeper. They are among our hardiest Warblers and are often locally abundant.

The dress of the Pine Warbler is rather plain. The upper parts of the male are bright olive-green, with a tinge of gray. There are two white wing bars and two patches of white on the outer tail feathers near the tips. The under parts are bright yellow washed with ashy, shading into white on the belly. The female is brownish on the back and dingy white below. They are about five and one-half inches long. In summer they are found from Florida to Canada and they winter from North Carolina southward.

American Redstart. In late spring and summer a common Warbler in the bushes and second-growth trees along roadsides and streams, and in the edge of the woods, is the American Redstart. He is very conspicuous for his striking colors, orange and black, and for his ringing song. The orange is darker than that of the Baltimore Oriole, and there is a dash of white distinctly seen as he darts about. They have a peculiar habit of drooping the wings when perched, as though weary, and when in flight the tail is wide spread.

The Redstart is a very beautiful Warbler, lively and cheerful in habit, and attractive in song. Its strain is variously indicated by words, "*che, che, che, che-pa*" being a common form. But it seems to me that Mr. Chapman's rendering, "*ching, ching, chee; serwee, serwee, ser-*

Courtesy of the National Association of Audubon Societies

AMERICAN REDSTART

wee," is nearer the song I hear from this very common Warbler. The female sometimes sings a part of a song but the male is really the vocalist of the family. They have a plaintive call note, "*che-ep*," and a sharper "*chick*."

The upper parts of the male Redstart are glossy black, the basal halves of the wing and tail feathers a deep orange. The throat and breast are black, the latter bordered with orange. The belly is white, the sides somewhat washed with orange. The female is much less conspicuous in coloring, having the upper parts greenish gray, and in place of the orange a dull yellow.

These beautiful birds are common in our summer woods and their range is broad, extending over the larger part of North America. They nest from North Carolina to Labrador, wintering in the West Indies, Mexico and Central America. They are slightly less than six inches in length. The nest of the Redstart is a well made cup of fine strips of bark, plant fibre and down, lined with fine roots and tendrils. It is usually placed in the fork of a limb from five to twenty-five feet above the ground. The eggs, grayish white spotted with brown, are four or five in number.

Yellow Warbler. A very common bird in summer about the thick shrubbery of the parks, the bushes that overgrow the river banks, and even about the hedges and lawn is the Yellow Warbler. He is a pretty little fellow in a bright suit of yellow, with a happy song heard at all hours of the long day. Not only does he cheer

the heart of his dainty little mate at her work with his tuneful melody, but he actually assists at the labor of nest building and care of the brood. Rarely do we find more delightful and altogether commendable traits than in the family of this abundant Warbler.

He is in full song when he arrives in early May, and his "*weeche, weeche, weeche-we-we*" is a welcome addition to the swelling chorus. They are seen frequently about our lawn during summer, the Yellow Warbler being one of the birds that so kindly and so thoroughly, day after day, glean the injurious insects from our shade trees. I always feel very grateful for their services, and derive much pleasure from their bright coats and sprightly songs.

Every year they nest in the bushes by the river, and if you paddle quietly along close to the bank, locating their home is a very easy matter; but one might walk along the bank many times without finding it. The nest, usually hung from a forked branch a few feet above the ground, is a well-built little cup made of bits of bark and fine grass, with a soft lining of plant down. The eggs are of greenish white color heavily marked with brown and lilac about the larger end. This Warbler is often called the Wild Canary from his close resemblance to that household pet, but he may be easily identified by his slender bill and the dainty brown stripes like faint pencilings on his breast. The upper parts are bright greenish yellow, somewhat brighter on the crown. The wings and tail are blackish, the feathers of both somewhat fringed

with yellow. Underneath is brilliant lemon-yellow streaked with brown. This is a real yellow bird, true to name as the Indigo Bird. The female is somewhat paler and the breast-stripes are very faint. They are slightly more than five inches long. They range over the greater part of North America, nest as far north as the Arctic region, wintering in Central and South America.

Black-throated Blue Warbler. A Warbler I frequently find in second-growth woods, where the underbrush is thick, is the Black-throated Blue. His name describes him sufficiently to insure his identification, and if there be added a suggestion of the white patch on the wings, the description will be complete. This is a very handsome bird, strikingly different in dress from all other Warblers.

During the migration I frequently find him about the city parks, but, so far as I have observed, they nest in forest seclusion. As you venture into their haunts in June, you will hear a sharp "*cheep, cheep,*" and later, if you are patient, "*sweeze, sweeze, sweeze,*" uttered by the male when perched low.

The nest is usually placed in an evergreen tree not far from the ground. It is made of fine bark and grass, lined with vegetable fibre. The eggs are three to five in number, grayish white with large and small spots of brown.

With the male the upper parts are slaty blue, the edges of the wings and tail deep blue. There is, as we have seen, a distinct white patch on each wing and also on the outer tail feathers.

The throat, sides of the head, and breast are black, the belly white, the sides black and white. The dress of the female is quite different, rendering her rather difficult of identification. The upper parts are olive-green with a bluish tinge on the tail. The white wing patches are indistinct, and the sides of the head are gray. The under parts are dingy yellow. They are about five inches in length. They nest from Minnesota and Massachusetts northward to Labrador, wintering in the tropics.

Black-throated Green. This Warbler is also comparatively easy of identification, for his notes are quite characteristic and his plumage is both brilliant and unique. The male has the upper parts light olive-green, with a line over the eye and the cheeks bright yellow; and there are two white wing bars. The throat and breast are black, the belly white, the sides streaked with black. The best field marks are the yellow cheeks, white spots on the tail and the black throat. The dress of the female is similar, but the black of the throat and breast is mixed with yellowish.

During migration they are found everywhere, but in the nesting season they frequent the evergreen woods. Then the male pauses in his flycatching and drones his high pitched song, which begins with several level notes and rises suddenly at the end. The song is brief, but possesses much merit; in fact, it ranks very high among the Warbler songs. These birds nest from Illinois and southern New England, northward to Hudson Bay, and winter in the

BLACK-THROATED GREEN WARBLER

tropics. They appear about New York at the end of April or in early May.

Nashville Warbler. About second-growth patches of woods and in the thickets that fringe ponds, lakes and streams, in New York State and New England, this sprightly little Warbler is one of the common birds of summer. They receive their name from the fact that Wilson, the discoverer of the species, found them near the city of Nashville, in Tennessee. They are not so often dwellers of the deep woods as many of their cousins, and so their acquaintance is more easily made. Besides, they live much in the lower branches of trees and in bushes, and nest on the ground, traits which render them quite conspicuous on our excursions afield in early spring and summer.

The dress of the Nashville Warbler is more refined than brilliant, and is of such a character as to render him rather easy to identify. The top and sides of the head of the male are blue-gray. Partially concealed on the crown is a patch of chestnut, an inconspicuous mark. Elsewhere the upper parts are olive-green, and there are no wing bars. The under parts are bright yellow, brighter on the throat and shading to white on the belly. The female has practically the same dress but somewhat paler. With this variety there seems to be little love making, and it appears that the mate has small part in setting up housekeeping, except as he stimulates and cheers the female at her work. Perchance on a near-by bush he sings his bold and pleasing song, which has been indicated by

the words, "*pea-cie, pea-cie-hit-i-hit-i-hit.*" Langille finds in the first part of the song a similarity to that of the Black and White Warbler, while the latter part is likened to the notes of the Chipping Sparrow. There is also a flight song, with "chippings" before and after, which is said to be more hurried.

The nest of moss, lichens and dead leaves, lined with fine rootlets, is placed on the ground in small growth, often among gray birches. This habit has led to its being called the Birch Warbler. The eggs are white with fine brown spots. They range in summer from southern New England to Labrador, wintering in Central America and Mexico. These birds are slightly less than five inches in length.

Parula Warbler. If you visit thickly wooded sections either in city parks or in the country, about the middle of May, you will be pretty sure to find a large number of migrating warblers. Prominent among them will be the charming little Parula, one of the most attractively dressed of the whole family. They are very tame during migration and if you sit quiet will come close about you. In mid-May this year, we found them in Forest Park, New York City, so plentiful that we could hardly believe our eyes, and so tame it seemed they would light on our hats. They were feeding busily on gnats, flies and mosquitoes. On another visit a few days later we found they had gone on their way to the nesting grounds.

The dress of the Parula is very pretty. The upper parts are grayish blue with a yellow patch

on the center of the back. There are two white wing bars and the outer tail feathers have a white patch near the end. The throat and breast are yellow with a band across the chest, varying in color from chestnut to brownish black. The belly is white and the sides somewhat washed with brown. The female has similar coloring, but the band across the chest is duller, sometimes altogether lacking, and the upper parts are inclined toward greenish.

The song of this really beautiful creature is neither loud nor especially musical, an insect-like "*ze-ze-ti-ti.*" The alarm note is a sharp "*chip*" or "*chick.*"

As a nest builder, the Parula is one of the most interesting of birds. In the trees which border ponds and lakes, and along the seashore, in fact, wherever in their nesting range the long, gray usnea moss is abundant, their nests are located. The nest is simply a hollow in the center of the bunch of moss and no other material enters into its structure. In this picturesque and highly artistic nest are laid the tiny white eggs, thickly spotted with brown. The Parula ranges in summer from the mountains of New York and Virginia, northward to New Brunswick and Nova Scotia, wintering in the tropics. This bird is slightly more than four and one-half inches long.

Chestnut-sided Warbler. Another brilliantly dressed Warbler is the Chestnut-sided, whose name reveals the most striking feature of its handsome dress. The top of the head is bright yellow, bordered on the sides with black, and a

black band from between the eye and the bill extends down the sides of the neck. There are white patches on the cheeks and two white wing bars. The back is streaked with dark and light olive-green. The tail is black with white patches near the tips of the feathers. The under parts are white, the sides chestnut. The dress of the female is similar, but the colors are somewhat fainter.

This is a common Warbler in New England in summer, but leaves early. They are good fly-catchers and also gleaners of bugs and grubs among the leaves of the trees about their homes. Sometimes they come to our lawn on a food quest, although their nests are a half mile away. In blackberry bushes I often find a nest made of tendrils, strips of bark and rootlets lined with pine needles. The eggs are white with brown spots mostly about the larger end. They range in summer from Illinois and central New Jersey north to Newfoundland and southward in the mountains. They winter in the tropics.

The song of the Chestnut-sided Warbler is often compared to that of the Yellow Warbler, and it will require a little experience to discriminate between them. It has been described as "*te-te-te-te-we-cher.*" Another version is "*tsee, tsee, happy to meet you.*" The notes are distinct and rather explosive at the end. The song season is short, usually ending by the middle of July.

Wilson's Warbler. This Warbler is little known in the Eastern States except as a traveler in spring and fall. Aside from the few that nest

Courtesy of the National Association of Audubon Societies

CHESTNUT-SIDED WARBLER

in northern Maine, they are summer residents in Canada northward to Labrador. During migration you will find them in the bush ricks along the brooks and about ponds, where they easily catch their supply of gnats and flies, a work at which they are very expert. There you will hear their thin, high pitched "*zee, zee, zee,*" not unlike the first notes of the Redstart, and less wiry than the similar notes of the Golden-crowned Kinglet. It is a modest little song, unpretentious, but sweet and happy when heard in the season of pussy-willows and alder catkins.

This bird is slightly smaller than the Yellow Warbler. Its most prominent feature in dress is the fine black cap above the yellow forehead. Otherwise the upper parts are a handsome shade of olive-green; the under parts are bright yellow. The female has the same colors, but sometimes she lacks the black cap. The nest, on the ground and well hidden by low bushes, is made of leaves and grass. They arrive in the vicinity of New York in early May.

Maryland Yellow-throat. There is not a more fantastic feature of dress found in the whole Warbler family than the black mask worn by the Maryland Yellow-throat. It is so peculiar that no other field mark is necessary to insure his identity. Otherwise his colors are ordinary enough, olive-green above and bright yellow below, brightest on the throat. The belly is white with brownish washings on the sides. The female is a much more difficult bird to identify, as she is lacking the black mask and

there are more of the brown washings in her plumage. You will often be puzzled by this little lady in yellow and brown, but when her "*chack, chack*" of alarm brings to her side him of the black mask your doubts will be wholly dispelled.

I find these Warblers in summer more commonly in the alder swamps and ricks of bushes that border brook and cove. In a bush near the ground is built a bulky nest of coarse grass and bark, lined with fine grass and tendrils. The four tiny white eggs are finely spotted with brown. It is said their song varies much in different localities, but the one I hear is a loud and melodious "*wichery-wichery-wichery,*" sung over and over, many times a day, and at all hours, with a swing that is very pleasant to the ear. They are very common birds in their summer range, which extends from Georgia to Labrador. They winter from the Gulf southward.

Yellow-breasted Chat. This is the largest member of the Warbler family and, if the reports of him are true, by far the most eccentric; and enough of his peculiar traits are well established to warrant that characterization. I have not seen him in New England, but in northern New Jersey I have found him in bush-grown tracts and among sapling growths on the Orange Mountains.

Usually this is a very shy bird, but he is so conspicuous in coloring and size as to make his identification an easy matter. The upper parts are olive-green. The throat and breast are

YELLOW-BREASTED CHAT

bright yellow, shading to white on the belly. There is a white line over the eye to the bill, a white eye ring and white stripes on the neck. The bill is large and slightly curved. He is nearly seven and one-half inches long.

The Chat has no utterance worthy to be called a song, but it is a noisy creature nevertheless. The wonder is that one bird can produce such a *potpourri* of cacks, chucks and calls as will sometimes greet your ears when in the haunts of this vocal anomaly. It is said that by sharply striking together two pebbles, you can start the Chat into his jumble of sounds, the most peculiar notes, in some respects, of the bird choir. His antics are in keeping with his utterances, and he is the veritable clown of bird-land.

They build a large nest of coarse grass, leaves and bark, lined with fine grass, in bushes near the ground. The eggs are white, evenly spotted with brown. This bird ranges north to New England in summer and winters in Central America.

Black-poll Warbler. This plainly dressed Warbler might easily be told by the black cap he wears, suggested by his name. But an easier way, perhaps, to identify him, as it will save you many a scramble in the thicket, is by his thin, wiry song, a monotonous "*tsee, tsee, tsee, tsee, tsee, tsee,*" in effect not unlike the sound made by filing a saw. When you first hear it you would probably take it for the sound of a cicada, were it not too early in the season for the shrill notes of that insect. Beginning low, the notes in-

crease toward the middle and diminish toward the end, forming a musical swell that is almost perfect. While a unique and highly interesting performance, it is hardly worthy to be called a song. I have never heard any other sound from the Black-poll, but it is said to have a call note "*tsip*," or "*chip*," that is occasionally heard.

They are the least restive of the Warblers I have observed. Perched on a dead tree, I have heard him trill his quaint lay for a half hour without stopping to catch fly or beetle that might chance to go droning by.

In summer they seek evergreen trees in the forest, where they build from four to ten feet above the ground. The nest is made of fine rootlets, twigs, moss and grasses, lined with fine grass or feathers. The eggs are usually white, spotted with brown or lilac. The crown of the male is black, the nape black, streaked with white, and there is a dash of white over the eye. The back is grayish, streaked with white, and there are two white wing bars. The white under parts are streaked with black, more prominent on the sides. With the female the crown is less black, the back is inclined toward olive-green and the under parts are yellowish. Black-polls are about six inches in length. They nest from northern New England to Greenland and in Alaska, wintering in South America.

Ovenbird. This very attractive little Warbler is so different from all others in habits and notes that he will be easily identified when once you meet him. Contrary to the habits of his cousins, he spends the most of his time on

the ground, walking sedately about in quest of his food, bugs, grubs and various insects. In manner of movement and pose he reminds one of the larks. In flight he seems like a Thrush and formerly was grouped with that family under the name of Golden-crowned Thrush; but more careful investigation caused him to be classified as a Warbler.

He is a very common inhabitant of the leafy woods of the Northern States in summer, where his peculiar notes are heard almost constantly. Beginning low, they increase in volume, with explosive emphasis at the end. Mr. Burroughs very fittingly represented his notes thus: "Teacher, *Teacher*, TEACHER, TEACHER, **TEACHER.**" This interpretation was seen to be so fitting it has come to be almost universally known as the Teacher Bird. This strain is not melodious, but is decidedly energetic and suggestive of cool, sylvan retreats and leafy bowers with carpets of dun brown.

The Ovenbird is slightly longer than the Black-poll and stouter. The crown is bright orange bordered with black lines. Elsewhere the upper parts are olive-green somewhat tinged with brown. The under parts are white with the sides of the throat, breast and sides heavily marked with dark brown. It is a handsome bird, pert in bearing and smart in dress. The name, Ovenbird, comes from its unique nest built almost wholly of dry leaves and roofed over like a Dutch oven. Placed on the ground in the midst of a thick carpet of dead leaves, it is most difficult to find unless one chances

upon it quite by accident. The four or five eggs are white, spotted with brown. They nest from Virginia and Kansas northward to Manitoba and Labrador and winter from Florida southward.

Water Thrush. While this bird bears the name Thrush, it is a Warbler nevertheless. As I had found them singly here and there in my bird studies, I supposed them to be comparatively rare birds until last May when I found them in Forest Park, New York City, so abundant that for a time I could hardly believe it possible. In spring there are in the park a number of hollows filled with water, little lagoons which are dry in midsummer. About these and the marshes, Water Thrushes were in scores and hundreds. But their stay was brief, and on they went to their nesting grounds in the north. This is a good-sized Warbler with rather long legs, which tilts its tail like the Yellow Palm. The upper parts are uniform olive-brown with a buffy line over the eye. The under parts are white tinged with yellow, and everywhere streaked with black. Male and female have the same dress.

The Water Thrush excels as a singer. When I first heard it I was quite amazed at the volume and variety of its notes. Perched on a tree above a babbling stream that rushes down from the mountain side through alder thickets, it sang a wild and varied, yet melodious lay. The effect was marvelous, and to my sense, this Warbler takes rank with the very best singers of the family.

The nest is often placed in the upturned roots of a tree, or is safely tucked away in a mossy bank. It is made of moss, lichens and fine roots. The eggs are four or five in number, speckled with fine brown spots about the larger end. The Water Thrush is rather more than six inches long. The nesting range is from northern New England north to Labrador and Newfoundland. They winter in the West Indies and Central America. A very similar variety, called the Louisiana Water Thrush, has a more southern range in summer, advancing north to Connecticut. The colors are similar to the above, except that the line over the eye is white and the middle of the throat and belly are unstreaked. This bird is also slightly larger than the Water Thrush.

Canadian Warbler. This is a very beautiful bird, common enough in its nesting grounds from central New England northward. They are often seen with other Warblers during migration, but in the breeding season they frequent the deep woods usually near the water, where birch, beech and maple mingled with evergreens make a dense bower of green. The upper parts are a handsome gray. The crown is spotted with black, and a region about the eye, below and behind, is black. The under parts are bright yellow with a line of black spots about the neck like a necklace. A line from the bill over the eye is yellow. The female has a similar dress, but the spots on the breast are much lighter. Their song is animated and melodious, sometimes rendered as "*tre, tre, tsme, tre, tre.*"

They build a nest of bits of bark, dry leaves, moss and rootlets, on the ground by a clump of ferns, under a log or hummock, or in the upturned roots of a tree. The eggs are white, thickly spotted with brown.

The Magnolia Warbler. The prevailing colors of this Warbler's plumage have given it the name of Black and Yellow Warbler. It is rather strikingly marked and is an easy bird to identify. The back of the male is black bordered with olive-green; the crown is gray, the cheeks and forehead black, with a line of white behind the eye. The lower parts, throat and rump are bright yellow, the breast and sides strongly streaked with black. The tail is black with the inner veins of all except the middle feathers *patched with white midway*, leaving the terminals black. There is also a white patch on the wing coverts. The female's dress is similar but the colors are less distinct.

The song of the Magnolia is loud and clear, somewhat like that of the Yellow Warbler in tone, and has been likened to the syllables "*chee-to, chee-to, chee-tee-ee,*" uttered rapidly and with falling inflection. The nest of plant fibre, bark, roots and grass, is usually placed in a bush near the ground. The eggs are white, thickly marked with cinnamon-brown about the larger end. The Magnolia breeds from northern New Jersey to Newfoundland and winters in Central America. They seek tracts that are openly wooded, the edges of the forest, and bushy pastures.

Blackburnian Warbler. This bird is a dweller

in the evergreens, and even during migration he is more often found in dark woods than in the open country. As he spends most of his time in the treetops, it is not altogether easy to make his acquaintance, although his beautiful plumage makes him rather a showy bird. It is almost always by tracing a rather shrill song to its source that I find him, not a difficult task as he is a constant singer and his clear notes are distinctly audible. "*Wee-see-wee-see-wee-see*," he sings to his busy mate, who, no doubt, is much cheered by his tuneful effort. He is a willing helper in the many duties of nest building and rearing the young.

Black, white and orange are the colors of the Blackburnian, so strikingly arranged as to make him one of our most attractive Warblers. The crown, back of the neck and back are black, and the sides are streaked with black. The center of the crown, line over the eye, patch behind the ear coverts, throat and breast are rich orange. The back and tail are streaked with white and there is a white patch on the wings. With the female the orange is much duller, the back is olive-gray, and there is much less white. The nest of fine twigs and grass is placed high above the ground in evergreen trees. The four whitish eggs are spotted and dashed with brown. They range in summer from northern New England to Labrador and winter in the tropics. This bird is about five and one-fourth inches long.

Chapter XIII

BIRDS OF MANY FAMILIES

Blue Heron, Sandpiper, Bittern, Kingfisher Waxwings, Cuckoos, Mourning Dove, Bob-White, Tanager, Chimney Swift, Nighthawk, Whippoorwill, Starling, Shrikes.

"Lo! a great blue heron. Seeing us approach, it spread its long wings and flew solemnly across to a dead tree on the other side of the lake, enhancing rather than relieving the loneliness and desolation that brooded over the scene."

—*The Adirondacks*, John Burroughs.

The birds considered in this chapter belong to several different families. In no instance are more than two or three varieties of a family described, in several families but a single variety.

Great Blue Heron. Of all the feathered sojourners of our Northern States this Heron is by far the most picturesque; and one of the saddest tragedies in bird life is seen in his rapidly diminishing numbers. In my youth he was a very common bird about the ponds and rivers of the neighborhood. Last summer, although I many times visited their former haunts, I did not see a Blue Heron in that vicinity. Later, however, on my trip in the West Branch waters, several were seen in the marshes that border river and lake, indicating that the few that

GREAT BLUE HERON

remain have taken to the protection of the wilderness. A few years since, while fishing on Mooseluckmaguntic Lake, the guide told me that he, in company with other guides, was accustomed to visit each year a nesting colony of Blue Herons to destroy the young, and that they were usually very successful. This destruction was justified, in the guide's mind, by the fact that the Blue Heron, being a fish eater, catches many young trout, thus notably diminishing the fisherman's chances. Such destruction, together with that which results from the inability on the part of hunters to resist the temptation offered by so good a "mark," has been the main cause of the diminishing numbers of this noble creature.

As fish and frogs comprise the main part of his food, the Heron spends much time among the reeds and rushes that border lakes, ponds and streams. There his colors so perfectly blend with the hues about him that he is well protected. But a strange noise causes him to raise his long neck, when be becomes very conspicuous. He is the tallest of our birds, being more than four feet in height, and his great wings have a spread of five to six feet. The neck and legs are very slender, the bill, six inches long, is heavy at the base, tapering to a sharp point, a most effective instrument which he uses with great precision.

The plumage of the Great Blue Heron is pleasing to the eye. The back, rump and wing coverts are a handsome slate blue. The head, neck and breast are streaked black, white and

yellowish, and there are long feathers like plumes pendent on the back of the head, while long and very narrow feathers at the base of the neck form a sort of ruff. The bend of the wing and the leg feathers are chestnut. These birds breed in evergreen trees usually in colonies, the nest being merely a rude platform of sticks high above the ground. In summer they range over North America to Hudson Bay, wintering southward to Cuba. Their only cry is a hoarse "*quawk, quawk,*" uttered when in flight.

Spotted Sandpiper. The Spotted Sandpiper is a very familiar bird about our lakes and streams and along the seashore as well. He belongs to a large family of shore birds, among them being many that are regarded as lawful game. This is by far the most common of the family, and in summer his range is very wide. He is a friendly, trustful little fellow, so lovable that he has made a great many friends, of some of whom he may well be proud. That gentle poet, Celia Thaxter, wrote a beautiful little poem on this bird which has been much admired.

Few sounds are more often heard by the vacationist, who, in boat or canoe, threads our inland waterways than the plaintive "*tweet, tweet*" of the Sandpiper. He springs up from the shore just ahead of you, swings out in a wide circle to a point some distance in advance of your craft, and lighting again, runs along shore, halting ever and anon to watch your progress. He has a peculiar teetering or balancing motion of the body which has given him the name of "Steel yard Bird," or "Teeter-

SPOTTED SANDPIPER

up." He nests near the shore, or in a field or pasture, near water, building a very poor nest of grass which merely serves as a receptacle for the eggs. Since the young birds run almost as soon as hatched, they have little need of a home. The eggs are very large, of light tan color, thickly spotted with dark brown.

The Spotted Sandpiper is rather a handsome bird, although there are no brilliant colors in his plumage. The upper parts are grayish brown with just a shade of green. The head and neck are streaked with black and the back has spots of the same color. The tail feathers have dark bars and streaks, and the light under parts are heavily spotted with dark brown. They have long legs, large eyes and a sharp bill. They are about seven and one-half inches in length. Their summer range extends as far north as Hudson Bay and they winter in Brazil.

American Bittern. Another inhabitant of the grassy marshes and swamps in summer is the American Bittern, or Stake Driver as he is sometimes called. This name arises from the supposed likeness of one of his utterances to the sound made by striking a stake with an axe. To my sense the peculiar cry of the Bittern is best represented by the words "*plunk-er-lunk, plunk-er-lunk,*" a sound not unlike that produced when using an old-fashioned wooden pump. This is "the booming of the Bittern."

The American Bittern is a member of the Heron family. It is more than two feet in height. The upper parts are mottled brownish, the throat is whitish, and there is a shiny-black

streak on either side of the neck. The under parts are creamy buff, streaked and dashed with brown. The legs are yellowish. There are few better examples of protective coloring than that furnished by this bird. So closely do his colors conform to the browns and yellows of his usual haunts that he is quite hidden from the careless eye. When in danger of being discovered he will sometimes point his large bill upward and stand so motionless that it is very difficult to distinguish him from his surroundings. When in this position, if the wind springs up, it is said he will move in unison with the swaying reeds and grasses, the better to carry out the deception.

The nest of the Bittern, made of coarse grass and rushes, is placed on the ground in marshes and swamps. The eggs, three to five in number, are drab or slate-gray. They arrive in late April or early May and range in summer throughout the East, north of Virginia. They are not common birds, and rarely are more than a single pair found in a marsh. They winter from Virginia southward.

Belted Kingfisher. A fish-eating bird, very common in summer about the lakes and streams of the North, is the Belted Kingfisher. His method of fishing is quite unlike that of the Blue Heron or Loon, and is much more spectacular. From some stub or limb hanging over the water, he watches with keen eye for the small fish which constitute his food. When he catches a glimpse of fin or shining back near the surface, down drops this fisher like a plummet,

BELTED KINGFISHER

head first, straight into the water, seizing the fish in his strong beak; then he rises again to his perch, or swings along the shore to his nest with a rattle of triumph. Often when in full flight, catching sight of a fish near the surface, he hovers for a moment by very rapid movement of his wings as though to steady himself for the plunge. But he does not always catch his prey, and dives again and again before his efforts are rewarded. Unlike the Osprey, his talons are not adapted for striking and holding the fish, but his large, strong bill is an excellent implement. Sometimes you will see him come up with wriggling minnow, which he strikes sharply against the limb, probably to stun it before swallowing; at other times the poor victim disappears with no ceremony.

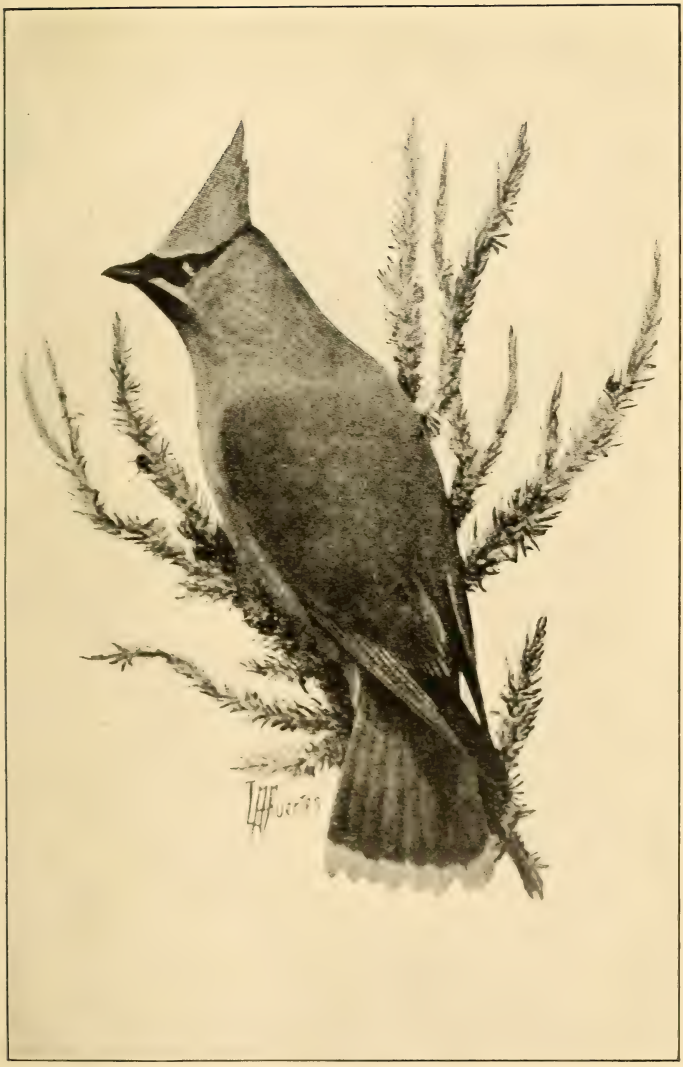
This bird, too, has fallen under the ban of the guides of the north woods, because of the large number of small trout and salmon he destroys. But their wholesale destruction is not so easily accomplished as in the case of the Blue Heron, for Kingfishers nest in single pairs in a secure chamber at the end of a tunnel five or six feet long, excavated in a sand bank. The nest consists of a rough collection of grass, fish bones, bark, sticks, etc., and is not a savory place. As a nest builder he has little skill, but he returns to the same hole year after year.

The Belted Kingfisher is a bird of striking appearance. On his rather large head is a prominent crest, almost black, which gives him a somewhat belligerent look. The back, tail and a band across the white breast are a handsome bluish-

gray color. The wings and tail are speckled with white, the throat and sides of the neck are white, and there is a spot of white in front of the eye. With the female the band on the breast and the sides are brownish. The Kingfisher is more than a foot long and rather thickset. They have a wide summer range, from the Gulf States to Labrador, and winter from Virginia to the tropics.

Cedar Waxwing. These birds are veritable nomads. So strong in them is the love for the life of a rover that they postpone the nesting until summer is well advanced, and no sooner are the young able to fly freely, than they again take up their wanderings. Even in late August I have found their nests with eggs unhatched. This means that the young are scarcely full grown before the return of Jack Frost. During at least ten months of the year they roam over a wide range of country in small bands, seeking a food supply which varies much with the seasons. During the cold months they feed upon cedar berries; later they develop a taste for cherries, and at times the berry patches are the center of their activities. Besides, they are expert flycatchers, and at nesting time insects form a large part of their food.

Both in manner and dress the Cedar Waxwing is one of our most refined birds. The delicate coloring of their plumage, to my sense, is not surpassed in attractiveness in the whole bird world. It has been compared to the exquisite tints of a Japanese water color. The upper parts are brownish-gray, shading into a



CEDAR WAXWING

faint yellow underneath. A rich black line runs through the eye back to the prominent crest. The tail has a terminal band of handsome yellow; on the wing is a dash of bright red like sealing wax, and the chin and forehead are black. The female has much the same colors but more subdued, and the crest is smaller. These birds are about seven inches in length.

The Waxwing's manners are what one would expect in a bird so tastefully dressed. They seem to be always courteous and amiable, refined and undemonstrative in their ways. They are strangely silent; but a single note have I ever heard them utter, a faint lisping "*tseep*," which is sometimes likened to beads strung on a string. When one approaches their nest there is no protest. The mother bird stares at you with steady eye until you can almost reach her, then slips away without a sound. The nest, which I usually find in the orchard or in the alders on the river bank, is a flat, shallow structure of sticks, moss, grass, bark, leaves, etc. The dull, bluish-gray eggs are spotted irregularly with dark brown. They range over eastern North America, in summer as far north as Labrador. Some winter in New England and New York, others wander as far south as Central America.

The Bohemian Waxwing has a more northern range and is rather rare in the United States. Occasionally they wander as far south as New York City. They are somewhat larger than their cousins, but in dress, habits and notes are similar.

Black-billed Cuckoo. To the Nature lover certain times of the year are associated with certain sounds, and he is not at all satisfied if each hurrying season does not bring to his yearning ear its characteristic voices. For me, the welcome, though strident frog chorus and the faith-inspiring strain of the Song Sparrow are so intimately associated with the advent of spring that I cannot fully realize that the season of Nature's awakening has really come until I have received the message from these never failing heralds. The first scent of clover always assures me that the Bobolinks are tinkling gaily over the broad grass fields at home, for to me clover blossoms and Bobolink song are closely associated. And with the coming of the sultry days when summer seems to settle down for her busy season, I listen intently for the strange, mellow, elusive "*k*, *k*, *koo*, *koo*, *koo*, *koo*, *koo*," the fascinating call of the Black-billed Cuckoo.

Something in the quality of these notes suggests the makeup of the bird, both as to appearance and character. As this call is uncertain and unobtrusive, so the bird is shy and retiring, with nothing of bustle or bluster about it. Sometimes in August from the lawn I hear the gentle "*koo*, *koo*," but am not at first able to say whether the bird is in a near-by tree, or a half mile away in the woods. On silent wing he slips into the thick foliage, blending so perfectly with his surroundings that he is quite hidden. If there is a caterpillar's nest in the tree, he is soon very busy with these

spinous tidbits, doing us a real service in their destruction. They eat a large number of caterpillars, so many, in fact, that the walls of their stomachs are full of the spines, a condition which does not seem to interfere with the bird's happiness.

The nesting habits of the Cuckoo are such as one expects from a bird of eccentric character. The nest is little more than a platform of sticks, so carelessly made as to afford little protection to the fledglings, and it is so flat that often the young fall out; but because of its low position they do not have far to fall. The eggs are laid at most irregular intervals, so there are often newly hatched youngsters, others half grown, and eggs in the nest at the same time. Sometimes, if you chance upon the nest of the Cuckoo, the owners will leave and not return, abandoning eggs and young to their fate. They are very tame birds, permitting near approach without taking alarm. When perched they have rather a crouching position and the long tail droops. They seem languid, even lazy, in all their movements except when feeding.

The Black-billed Cuckoo is larger than the Robin, being about a foot in length. The upper parts are a grayish olive-brown, the under parts whitish, and the wing feathers are narrowly tipped with white. The long, slightly curved bill is black. They range over North America east of the Rocky Mountains, breeding from the Gulf of Mexico to Labrador. They winter in South America, and are among the arrivals in early May.

Yellow-billed Cuckoo. This Cuckoo very closely resembles the Black-billed in size and plumage, but there are slight differences in coloring that render the identification comparatively easy. The wing feathers are tinged with rufous, the black tail feathers are heavily tipped with white, and the under mandible is yellow. Otherwise the coloring is the same. It seems that their range differs somewhat, for in Maine, where the Black-billed is a common bird, the Yellow-billed is rare, except in the southwestern portion. Its notes are harsher and more varied. Its feeding and nesting habits are very similar, and its domestic affairs in general are as badly managed. Farmers are coming to more fully recognize the value of these birds, for a pair will destroy all the caterpillars in a goodly area in the orchard, and they also eat beetles, moths, grasshoppers and crickets. Sometimes luscious blackberries and raspberries seem too attractive for them to resist, but the harm they do to fruit and berries is slight.

Mourning Dove. Of this numerous family the Mourning Dove is the only one now resident in the Northern States, if we except the Domestic Pigeons. Formerly the Wild Pigeon was so numerous that when migrating the flocks were said to "darken the sun." And when alighting in the forest, their combined weight was sufficient to break down great trees. They were trapped and shot by hundreds and thousands, sold for a trifle, and in many cases, where there was no market close at hand, were fed to the pigs. This ruthless destruction went on until,

YELLOW-BILLED CUCKOO

so far as ornithologists are able to determine, these beautiful creatures were exterminated. At least they have entirely disappeared from this part of the world. It is now more than thirty years since the last flock was seen, and a reward of a large sum of money offered for proof of a pair of nesting Wild Pigeons still remains unclaimed. There are few better, or worse, examples of the extermination of a once numerous creature. It is paralleled in the case of the American Bison, except in their case the destruction was halted just before the last were destroyed.

The Mourning Dove is a summer resident of the North, not common, however, except south of New England. Rarely a straggler reaches southern Maine. They are about a foot long, and plump. The upper parts are olive-brown with a tone of bluish-gray; the neck and head show metallic lustre, and there is a small black mark below the ear. The outer tail feathers are slate-gray towards the base; outward they are banded with black and tipped with white. The breast is buff, the under parts otherwise lighter. The female has similar colorings, but rather duller and without the metallic lustre.

In flight there is a sharp whistling sound made by the wings. They nest in a very rude structure of sticks, scarcely more than a platform, so poorly constructed that sometimes the fledglings fall through. Often they occupy an old nest of Robin or Grackle. They usually frequent open woods where the nest is placed in a tree at some distance above the ground. The plaintive

call of the male, "*coo-o-o, ah-coo-o-oo-c-oo,*" has determined its name, for there is a distinct tone of sadness about it, and it is uttered, apparently, with much feeling. After the breeding season they gather in small flocks. They winter from New Jersey to the West Indies.

Scarlet Tanager. The Tanagers are a very large American family, for the most part inhabitants of the tropics. But two varieties visit eastern North America, the Scarlet Tanager and the Summer Tanager, the latter rarely venturing farther north than southern New Jersey.

I see the Scarlet Tanager among the leafing trees of the parks in Brooklyn about the tenth of May, and the sight of this beautiful bird is always a delight to me. Although they are found occasionally in Maine, it has never been my good fortune to find them there, and consequently there is for me a thrill of exultation whenever I find them in their more common haunts of New Jersey or Long Island.

The male Scarlet Tanager is our most brilliantly colored bird. His suit is a handsome scarlet with black wings and tail and a dash of white on the under wing coverts. This gay dress is worn during the mating and nesting season and doffed with the approach of autumn. He then puts on a sober dress of light olive-green which is quite similar to that of his mate. In her case this coloring is well adapted for concealment when nesting. The female has the under parts yellowish-green, the wings and tail umber brown. These Tanagers are not good builders, their nest being loosely built of grass,

sticks and fibres, placed on a horizontal limb of oak or hemlock at considerable distance from the ground. The male is very solicitous of the welfare of his mate during the period of incubation, feeding her, and at times spelling her. When the fledglings appear, both parents care for them.

The song of this Tanager has been likened to the songs of the Robin, Rose-breasted Grosbeak and Baltimore Oriole, and there is an element of similarity. But the likeness is only slight after all, for he has his own lay. It is not clear like the Robin's, but is rather hoarse, "a monotonous '*chip, churr*,' repeated at short intervals, in a pensive tone." There is about the Tanager's song a distinctive quality that renders it so attractive that one could enjoy him as a neighbor for his song alone; this with his gorgeous dress makes him one of the most admired of the summer host.

I usually find the Scarlet Tanager in second-growth woods and bush-grown tracts, sometimes in the orchard where their fire red makes a striking picture when seen amid the blossoming trees. Formerly they were much more common than now, as they have fallen prey to the feather hunters who sought their poor bodies to adorn ladies' hats. With the enacting of laws in nearly all of the States, looking to the better protection of bird life, the Tanager has again become more common with us. They range in summer from the Ohio River and Virginia northward to the St. Lawrence and Manitoba, wintering in the tropics. They are more

numerous in the southern portion of their summer range. They are about seven and one-half inches in length.

Chimney Swift. Although this bird is more often called the Chimney Swallow and classed with that family, it is not a Swallow but, in fact, is entirely distinct. It belongs to a group numbering some seventy-five varieties of which this is the only one common in eastern North America. This bird, like the Swallows, feeds upon insects taken on the wing. Its body is slender and its wings long, giving it great strength and rapidity of flight, but there is lacking the grace of the Swallows.

The plumage is a dull, sooty, grayish-black, well suited, you would say, to a bird seeking its nesting site in a hollow tree, dark cave, or unused chimney. The tail feathers have sharp spines like the Woodpecker's, which assist greatly in clinging to perpendicular surfaces. The nest is a simple little shelf of sticks fastened to the side of the chimney or hollow tree, by means of a sticky saliva which is secreted by glands in the bird's mouth. Their only notes are rapidly uttered squeaks heard only when the bird is flying. They are about five and one-half inches in length. They usually rear two broods each year, but their precarious nesting sites render the fate of their broods somewhat uncertain. They range in summer from Florida to Labrador, wintering in Central America. They arrive toward the end of April.

At Katahdin Iron Works, in the Maine woods, there is an old furnace with a stone chimney

CHIMNEY SWIFT

some ten feet square, long since abandoned. This is the home of scores, probably hundreds of these birds. At twilight, when they are most active, there is a stream of sooty Swifts passing in and out with a booming sound as of distant thunder. This has been their favorite haunt for many years, furnishing more space for their nests than would many chimneys; and it is much safer, as there is no danger of their being smoked out.

Nighthawk. Two birds often confused in the public mind are the Nighthawk and Whip-poorwill. They belong to the same family, are about the same size, ten inches in length, and there is at first glance a similarity in coloring. But in notes, flight and habits in general, they are quite unlike; and a little care in observation will enable one to discriminate between them with absolute certainty.

The Nighthawk is not often seen perched, but on the wing they are common enough in city and country. They are not much in evidence in the early part of the day, but in the afternoon they course about, often at a height of several hundred feet, in what seems to us very erratic movements, catching the insects which constitute their entire food supply. They have no song, but their only note, a nasal "*peent, peent,*" is often heard far into the night; and it seems they can see to feed in the dark as well as in the daylight.

Some of their aerial evolutions are quite startling. Every now and then as one of these birds flies about, he will suddenly plunge downward with a great swoop, sometimes so near to

the ground that you will fear for his safety. But in good time he turns sharply and gracefully upward, and goes unharmed on his zig-zag course. The downward plunge is accompanied by a deep booming sound caused by the rush of air through the stiff primaries. So the Nighthawk is sometimes called the "bass trumpet player in Nature's orchestra."

While the Nighthawk is about the size of the Robin, because of the long wings they seem much larger in flight. The upper parts are blackish marked with irregular spots of white or cream-buff. The black tail has broken bars of cream-buff, and the outer feathers are banded with white near the tips. The breast is black and the throat has a white patch; otherwise the under parts are barred with black and white. The best field mark when the bird is in flight is the white spot on either wing, which looks like a hole.

When not on the wing the Nighthawk perches on a low limb, fence rail, rock, and even on the ground, if there are no trees or other perches about. In the city he rests on flat-roofed houses. Sometimes the two eggs are deposited on a loose pile of sticks; often there is no nest at all and the eggs are laid on the bare rock or house roof. The eggs are said to vary in color, seemingly the better to harmonize with the surrounding objects. Nighthawks range in summer from the Gulf of Mexico to Labrador, and winter in South America. They are among the arrivals of late May.

Whippoorwill. While the Nighthawk is rarely seen except in flight, the Whippoorwill

is rarely seen at all, but is well known by his weird call, a cry so strange and so emphatic that it is most startling, especially when heard near at hand in the deepening twilight. When the songsters have closed their evening praise service and settled quietly on some safe perch for the night, this nocturnal wanderer sallies forth for his period of activity. Low over bush-grown pasture or old field on noiseless wing he courses back and forth, picking up a meal of insects as he goes.

At intervals he lights and takes up his metallic call "*whip-poor-will, whip-poor-will,*" wholly unlike any other sound in Nature, so strange and characteristic that it will never be mistaken. This alternate feeding and "whipping" is kept up for several hours, then the bird rests for a time. Toward morning, before the other birds are astir, he sets out again and seeks his breakfast, finally with the coming of dawn settling down for the day.

The Whippoorwill always perches, or rather crouches, lengthwise of limb, fence rail, rock, or other object, because its small, weak feet do not seem strong enough to enable it to cling to a perch as do other birds. Its colors are such as to harmonize with its chosen surroundings, from which fact the bird seems to derive a deep sense of security, for you may approach very close before it will seek safety in flight. The general color is reddish-brown, mottled with grayish-black and dusky white. The most conspicuous mark is a white band, or crescent, across the throat; the tip end half of the outer tail feathers

is also white. The lower parts are cream-buff with irregular markings of brown. The bill, flat and very wide at the base, is surrounded by stiff, bristlelike feathers like the feelers of a cat. Perhaps they fulfill the same purpose! As this bird is rarely seen in daylight, its appearance is little known.

Whippoorwills, as a rule, build no nests, but lay the two dark eggs spotted with creamy white in a slight hollow on the ground, on a bare rock, log or stump. They range in summer from Virginia to New Brunswick and winter from Florida to Central America. They arrive in late April or early May. Little is known regarding their migrations, as they journey by night. Like Nighthawks, Whippoorwills are excellent friends of man, since their food consists wholly of insects. They destroy countless numbers of these pests, thereby adding greatly to the return from orchard, field and garden.

Starling. This is the only American representative of an Old World family that numbers something like two hundred species. More than twenty years ago about thirty pairs of Starlings were imported from England and set free in Central Park, New York City. They have found the climate and food conditions so satisfactory that they have increased greatly in number, and now are very numerous in all boroughs of Greater New York. They are gradually increasing their range and are now found more than a hundred miles away.

Starlings are gregarious except during the

nesting season. One autumn day, in Flatbush, near Sheepshead Bay, I saw a flock that I believed numbered several thousand birds. It is said that in England as many as one hundred thousand will gather in a flock, and when they settle in a field of ripe grain the damage done is serious. It seems now that these birds are likely to increase here to an extent that will make them a menace to the farmer and gardener. Perhaps, after all, it is unwise to upset the balance Nature has set by transporting birds from their natural habitat. At least in the cases of the English Sparrow and the Starling there is grave doubt as to the wisdom of their importation.

Starlings are, however, not to be classed with English Sparrows in any way, for they are attractive, happy little fellows whose great variety of calls and whistles will keep one interested for a long time. I have often looked for the boy whose whistles came distinctly to my ear, only to find not a boy but a bird perched on limb or chimney top, so mischievous and saucy in his bearing that I could almost believe he was aware of the deception he was practicing. They are attractively clad in short-tailed suits of black with metallic lustre. The feathers are minutely tipped with buff, giving the bird, at some seasons, a speckled appearance when seen close at hand. The under parts are grayish-brown, and the bill is yellow. The female is rusty brown. They are slightly more than eight inches long.

Starlings nest in hollow trees, crevices about roofs and towers, in leaders and corners of house

roofs; in fact, in any place sufficiently sheltered to meet their needs. They seem especially fond of a neatly constructed birdhouse set safely above the range of the house cat. The nest is loosely made of grasses and twigs. The four to six pale-blue eggs are usually laid in early May.

Starlings have no song in the true sense, but they have a great variety of calls and whistles that are highly pleasing, especially when heard in the heart of the city where bird notes are so rare. Perched some distance above the ground, with swelling throat and drooping wings, they call and whistle for a considerable time, then drop down to the lawn or garden, where they walk about looking for the crumbs, berries, grain, insects, etc., which make up their food. They are permanent residents. The extent of their ultimate range in America is a very interesting question.

Northern Shrike. This is a bird that comes down to us in the fall from his summer range in Canada. He has not a good reputation and his bad habits have given him the name of Butcher Bird, which, it seems, he well deserves. In appearance, he is rather sleek and well groomed, and his colors are pleasing. The upper parts are a handsome slate-gray; the wings, tail and a stripe extending from the eye to the back of the head are black. The under parts are whitish, washed with brown. The tail is tipped with white and there are dashes of white on the wings, plainly seen in flight. The black bill is hooked like that of hawks and other birds of prey.

The silent flight of the Butcher Bird is usually low, but as he alights he turns upward to a high perch where he may overlook the surrounding landscape. His food consists of mice, lizards, grasshoppers, beetles, and small birds of many kinds. Frequently he kills more prey than his immediate needs demand and the surplus he impales on thorns or barbed wire fence, or hangs in the crotch of a limb, for future use. His sudden appearance in a flock of small birds causes great consternation and there is quick seeking of cover. Oftentimes he catches several from a single family and the bird chorus is sadly lessened. The fact that he is a consistent foe of the English Sparrow has led some bird writers to condone his faults, and they also plead his cause because of the great number of insects and vermin he destroys. No doubt, much as we regret his killing of our songsters, he does much more good than harm and should be encouraged, rather than destroyed. I confess it has not always been easy for me to refrain from using harsh measures when this marauder in gray appears on the lawn, watching furtively the flock of Song Sparrows playing about the vines. But I am constrained to believe he is on the whole beneficial.

The Northern Shrike has a harsh, squally cry, "*joree*," and in the mating season they sing a song of considerable merit that has been likened to the melody of the Catbird. Only once have I heard this and I was quite surprised at the excellence of the effort, for I had never attached the gift of song to this cruel bird. They nest in

Canada, wandering southward in winter, sometimes as far as Virginia. They are about ten inches in length.

Loggerhead Shrike. This is a smaller counterpart of the Butcher Bird, so nearly like him in plumage that only by close observation can they be distinguished. The breast of the Loggerhead is pure white, or gray, and the black stripes on the side of the head meet on the forehead. They are one and one-half inches shorter than the Northern Shrike. In feeding and nesting habits they are much alike, but the loggerhead has not quite so unsavory a reputation regarding the killing of small birds. Yet I feel sure they destroy fledglings and eggs, if not adult birds.

For several years a pair of these Shrikes nested in a hackmatack tree by the roadside a half mile from our house. The nest, like that of the Blue Jay, was made of twigs and lined with coarse grass, and carefully hidden in a thick clump of limbs. About the first of August the parent birds would appear on our premises and from some exposed perch, the tiptop limb of an apple tree or telephone post, keep watch for passing prey. While I never actually caught them at mischief, I felt that the evidence against them was very strong. Early one morning there was an outcry from the Robin's nest in a low elm across the road. On going out we found the nest awry and the eggs gone; the Shrike was seen on a pole not far away. A Song Sparrow built a nest for its second brood in the thick woodbine just over the stable door. The nest

was very deep and securely fastened. When the young were about half grown a disturbance was heard one day while we were at dinner. Upon investigation we found the nest upset and the dead fledglings on the ground with the tops of their skulls torn off. The Shrike was about, and we felt very sure he was the culprit. They also eat beetles, grasshoppers, mice, lizards, etc. The Loggerhead is not a musician and its call notes are harsh. They breed over the United States from Minnesota east, south to Virginia, and in the lower Mississippi valley. Their winter range is somewhat farther south.

Bob-white. A small cousin of the Ruffed Grouse is the Partridge, or Virginia Quail, more familiarly known as Bob-white. This bird has furnished so much sport for the hunter that his range is now much diminished and his numbers are greatly reduced. Formerly they were found as far north as Maine, but now have practically disappeared from that State and they are much less numerous in southern New England.

Bob-white's dress is very tasteful. There are no brilliant colors, to be sure, but the blending of black, browns and grays is very pleasing and aids him much in concealment, for he is distinctly a ground-dwelling bird.

The upper parts are mottled browns and black, the under parts buff, or whitish marked with black and brown. The throat and forehead of the male are white and there is a white line over the eye; these markings on the female are buff.

The simple nest of leaves and grass is placed on the ground under a protecting bush, stump

or grass tuft. The white eggs are numerous, from twelve to twenty, and frequently two broods are reared in a season. The young run as soon as hatched and will hide in the leaves like little Grouse. There are few more cunning creatures than these little chicks when a few days old. At night and whenever they need protection, the little mother gathers her brood under her like a hen, spreading her wings and feathers to cover them all.

Bob-white is a permanent resident throughout his habitat, which covers the Eastern States and lower Canada. They rarely venture far from their native woods and fields, and, if left undisturbed, will breed year after year in the same locality. The families remain together through the winter unless broken up by the hunter, prowling fox or weasel. Toward spring they scatter, mating in April. Then is heard their well known call, "*bob-white, bob-white,*" so plainly uttered that their name is determined by it. There is a plaintive tone to this call that is quite appealing, and heard in the twilight of a soft spring day it compels a feeling of pity for his loneliness. They are friendly little fellows, visiting the garden to pick up grubs, seeds and scattered grain. But for our unfriendliness they would become as tame as Sparrows.

Chapter XIV

HAWKS AND OWLS

"True to the season, o'er our sea-beat shore,
The sailing osprey high is seen to soar."
—Alexander Wilson.

Part I

HAWKS

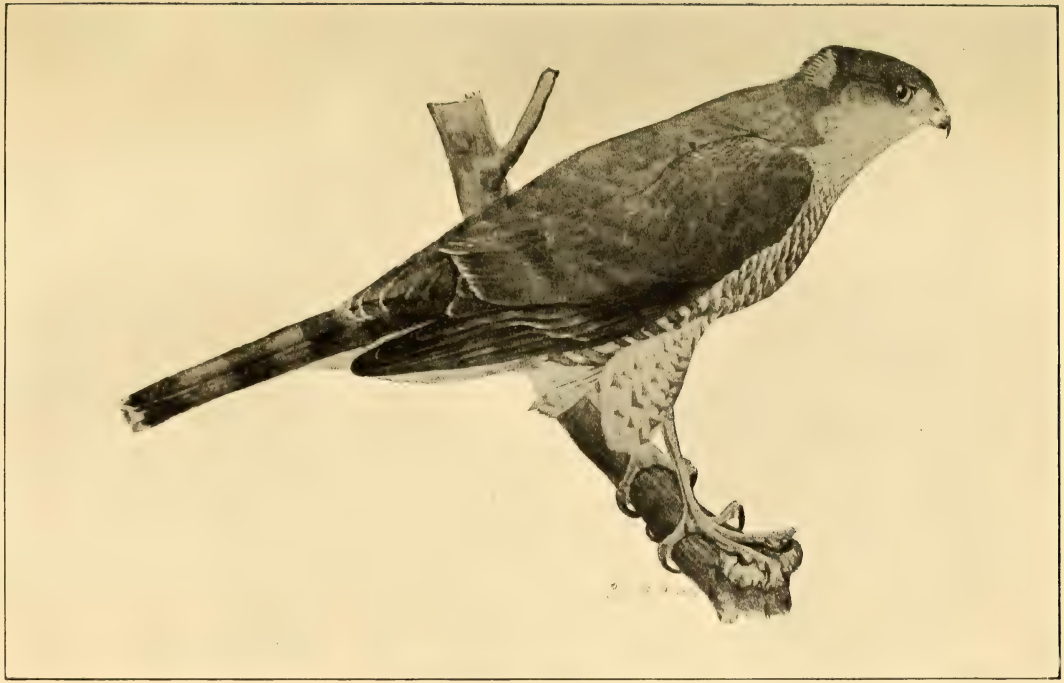
In this chapter are considered Hawks and Owls, two families of birds that belong to the same order, the so-called birds of prey, having similar feeding habits. There has been considerable change of sentiment in this country in recent years regarding these birds, largely due to reports sent out from the Agricultural Department at Washington giving the truth regarding their food. Formerly it was believed that Hawks and Owls fed largely upon small birds, chickens, doves, etc., and, in consequence, there was much prejudice against them, and every farmer's gun was ready to destroy them indiscriminately whenever opportunity offered. But now that the truth has been discovered regarding these "outlaws of bird land," it is found that the real culprits belong to a few varieties and that only a small part of their food is made up of birds and chickens. In fact, they destroy a very large number of mice and other rodents, shrews and moles, grasshoppers and other in-

sects, toads, snakes, etc., thereby rendering the farmer a real service which he too long has overlooked. Two or three varieties of Hawks, however, are poultry lovers, and will make considerable inroads in the farmyard if their course is not intercepted.

The general makeup of the Hawks is quite adapted to their needs as hunters. Their colors, grays and browns, are unobtrusive, their strong wings give them power of direct, swift flight, and their talons and bills are just suited to their uses. Nature has very well equipped these birds for the methods they pursue.

Marsh Hawk. This is the silver gray Hawk with the white patch on the rump, seen so often in summer flying low over the meadows, darting and turning in a most erratic course in search of mice and other dwellers in the thick grass. Often when hunting he utters a shrill cry which may be for the purpose of frightening small creatures into sudden movements, thus betraying their presence to this sharp-eyed destroyer.

This is a large Hawk, nearly twenty inches in length. The male, female and immature birds all differ in coloring. His color is distinctly gray, while theirs is quite brown. The upper parts and breast of the male are gray with the tail coverts white and black bars on the tail. The under parts are white with brown spots and bars. With the female the upper parts are dark brown, streaked on head and neck with lighter brown. Below the color is buff, streaked with dark brown. She, too, has a white patch on the



SHARP-SHINNED HAWK

rump. The young are darker above than the female, and much darker below.

The nest of the Marsh Hawk, on the ground in a swamp, is made of weeds, grass, rushes, etc., usually well concealed by its surroundings. The three to five pale bluish eggs are sometimes spotted with brown, but more often they are plain.

During the mating season the Marsh Hawk performs some strange antics in the air. Sometimes he will fly very high and then letting go, as it were, come tumbling down almost to the ground, uttering a shrill cry. It almost seems he is about to dash himself to pieces on the ground, but just in time he recovers himself and circles about in a rational way again. No doubt the purpose of these queer actions is to excite the admiration of the female, since he has no dulcet tones with which to woo her. This is a migrant Hawk, appearing in the vicinity of New York in April and departing in mid-autumn. Their range is very broad, but they are not numerous in any locality.

The Sharp-shinned Hawk. This is a Hawk of bad reputation, whose habits no doubt have done much to give an evil name to the whole family. He has well earned the name Hen Hawk. The appetite for small birds and chickens seems very keen in him and he is exceedingly well equipped for his career as a true hunter. Their flight is low and very swift and they are bold to a remarkable degree. Sometimes one of these Hawks will plunge into a poultry yard and, almost in the owner's face, seize

a chicken, apparently without fear of consequences. He will sometimes dart into a flock of song birds and with deadly precision pick out his chosen victim almost before the alarm can be given. Then away he flies to some safe perch where he may devour his prey at leisure.

This Hawk is about a foot in length, and the tail is square, an excellent field mark. The upper parts are bluish-gray in color, the primaries being barred with blackish. The gray tail has a whitish tip with black bars across it. The under parts are white barred with buff. The plumage of young birds shows more brown.

They are often seen flying in small circles high in air, when they may be known by their small size and square tails. They nest in the woods in tall trees and are permanent residents in southern New England and the Middle States. In summer they range somewhat farther north.

Cooper's Hawk. This Hawk resembles the foregoing in color, except that the crown is blackish. It is much larger, being about sixteen inches in length, and the tail is well rounded, a good field mark. This, too, is a real Hen Hawk and is even more destructive than the Sharp-shinned, because it is so much larger and stronger. When once this Hawk has had a taste of chicken it is not an easy matter to guard the flock against his persistent attacks. About the only safeguard then is to keep the poultry housed. These Hawks will attack and carry away rabbits, squirrels, Grouse, and under extreme conditions, even full-grown fowl. Its range is about the

same as that of the Sharp-shinned, except that it nests somewhat farther north. Its nesting habits, too, are practically the same.

Red-shouldered Hawk. This is a large Hawk, about twenty inches in length. As is the case in almost all the varieties of this family, the female is notably larger than the male, a fact not easily accounted for. The head, back and rump are dark brown, mixed with lighter shades of tan. The shoulders are a handsome chestnut-brown, giving the bird its name. The black of the wings is mixed with white and there are white bars on the tail. The under parts are rusty brown, barred with whitish. Although this bird is also called a Hen Hawk, it does not deserve the name, for very rarely it invades the farmyard, and only when in extreme need of food. They subsist, for the most part, on small mammals, insects, reptiles, and rarely on small birds.

These Hawks usually build a nest of twigs, leaves and moss in a tall evergreen tree, in the dense forest. They are great lovers of solitude, although often observed in the open. The breeding season is April. They are frequently seen sailing in graceful circles in the upper air, when they utter a shrill "*kee-you, kee-you.*" They range throughout eastern North America north to Quebec and Manitoba, and are resident throughout, except probably in the most northern part. These birds are of great value to the farmer because of the large number of pests they destroy, while the injury they work through the stealing of fowl is negligible.

Red-tailed Hawk. The male of this species is about twenty inches in length, the female twenty-three. The colors are much like those of the Red-shouldered, except that it does not have the red shoulders; but it does have a chestnut-red tail, which has determined its name. The back is mottled brown and white, the under parts are whitish with brown streaks, and there is a broken band of the same color across the belly.

It ranges practically over the same region, and its feeding and nesting habits are similar to those of the last variety. Its cry, however, is unlike and quite characteristic, a shrill, long-drawn note which has been likened to the sound of escaping steam. They are resident throughout the greater portion of their summer range.

Sparrow Hawk. Of our common Hawks this is the smallest and the most numerous. The male and female are of about the same size, ten inches in length. The crown is bluish-gray and there are white cheeks, with black stripes before and behind. The wings are slaty blue, barred with black. The rump, back and tail are dark brown with bars of chestnut. The under parts are buffy spotted with black. With the female the under parts are heavily streaked with darker buff. The sharply curved bill is slate colored, and the eyes are red. This combination of color together with the rather sprightly bearing of this little Hawk makes him, in appearance at least, a very attractive bird.

You will often see the Sparrow Hawk perched on an old stub or telephone post on the lookout

SPARROW HAWK

for his rations, various insects, mice, toads, frogs, spiders and rarely, small birds. Often, too, he is seen hovering on rapidly vibrating wings over the field, then dropping into the grass for grasshopper or mouse his keen eye has detected. His prey secured, he seeks his perch again, where his meal may be enjoyed. His flight call, "*killy, killy, killy,*" has given him the name in some localities of the Killy Hawk. While the name *Sparrow Hawk* is not deserved in all cases, yet they do destroy at times many of the smaller defenceless songsters.

The Sparrow Hawk ranges in summer northward into Canada, and winters south of New York. The nest is usually built in a hollow tree, or in the abandoned hole of a Woodpecker. The four or five brown-spotted eggs are laid in early May.

Pigeon Hawk. This Hawk derives its name from its likeness, both when perched and in flight, to the Wild Pigeon. Its dress is not so attractive as that of the Sparrow Hawk, and it is larger, being about a foot in length. Since their nesting range is north of the United States, they are known in the Eastern States only as migrants. They winter from the Southern States to South America. In the spring they are seen in migration toward the end of April and in early May, and are again in evidence during September and October.

With the Pigeon Hawk the upper parts are slaty blue; the under parts vary from light to dark buff, splashed with brown. There is a collar of rusty brown about the neck, the tail has

several distinct white bars and a white tip. They nest in hollow trees and sometimes in inaccessible cliffs. They are usually found in small growth or in the open country and are less shy than any Hawk we have studied. Their food is like that of the Killy, and they destroy small birds.

Broad-winged Hawk. This is another member of the Hawk family that may be regarded as especially beneficial to man, because of the large number of pests it destroys in the shape of mice, shrews, moles, grasshoppers, squirrels, etc. Many times in the forest where it is usually found, I have mistaken its peculiar cry for one of the notes of the Wood Pewee, a rather plaintive "*kii-e-e-e.*" This Hawk will perch for a long time on an old stub by the side of pond or stream watching for its prey; again for hours at a time it will be seen sailing in broad circles high above its forest home. They are usually quite tame and in their woodland retreats may be seen close at hand. The nest, usually placed high in a tree, is made of sticks, bark and leaves. The eggs, three or four in number, are white, spotted with lavender and various shades of brown. They range in summer throughout eastern North America to New Brunswick, wintering from the Southern States southward.

The Broad-winged Hawk is about sixteen inches long. The upper parts are grayish-brown margined with buff. There are two bars on the tail, which has a whitish tip. The under parts are whitish, heavily marked with cross stripes of brown. The three outer primaries are notched and are without the buff margins.

Fish Hawk. The food habits of this bird have determined its name, for it eats nothing but fish, and, in consequence, has become an expert fisher. It is a most thrilling sight to see one of these birds when slowly flying high above the water suddenly stop and hang for a moment on rapidly moving wing, then like a rock plunge straight down, strike the water with a great splash, seize the unsuspecting fish in its long, curved claws, and slowly rising with the wriggling prey tightly clasped, move away to some convenient stub where the meal may be enjoyed without interruption. It is not always successful, and has to plunge again and again before securing its prey, but it is persistent, and knows no other method of obtaining its food supply.

The Fish Hawk, or Osprey as it is often called, is a large bird, measuring two feet in length and the wing spread is often nearly or quite five feet. The back is dark brown, almost black, and there is much white on the head and upper neck; the throat and breast are pure white with grayish-brown markings; the wings are somewhat sprinkled with grayish-white and there are dim bands of the same color across the tail. The male has the suggestion of a crown.

Ospreys are poor architects. They usually build, in a tall tree or on some inaccessible cliff, a rough nest of sticks with little lining to protect the young birds. They will return to the same nest year after year, adding to the structure until it is a great heap. Where these birds are carefully protected, as on Gardiner's Island, they nest on the shore, sometimes in colonies

of several pairs. The eggs, two to four in number, vary much in color. Sometimes they are plain, dull white, again they are almost wholly dark brown. Usually they are creamy buff, spotted with dark brown. This Hawk ranges in summer from Florida to Labrador, and winters from the Carolinas to South America.

Part II

OWLS

"If a prisoner he be in the broad daylight,
He is lord in the dark greenwood!"

—Proctor.

While Hawks are daylight hunters, Owls, for the most part, are prowlers of the dark. When the shades of night fall and most of the inhabitants of bird land are settling down for the night, Owls waken from their day dreams, and, as the darkness deepens, begin to look about for their daily rations. Owing to the peculiar structure of the eye, Owls see much better by night than by day; in fact, they seem nearly blind in the full light of the sun, while in the dark they can make their way even in the forest and locate their prey seemingly with the greatest ease. In the gloom which pervades thick evergreen woods even at midday they can see to fly about, but are much more active at night. Another peculiarity of structure renders it impossible for them to roll their eyes in the sockets,

SCREECH OWL

so they have to turn the head when changing the direction of sight.

Owls, too, are very well equipped for hunting. Although they cannot dart upon their victims as swiftly as the Hawks, the soft and fluffy feathers render their flight quite noiseless, and they require less speed as their prey is usually asleep. The strong talons are excellent hooks for holding their victims, which, unless too large, are swallowed whole. The food of the various species is much the same, consisting of small mammals, mice, shrews, squirrels, rabbits and sometimes birds. Only rarely do the larger Owls visit the farmyard, so that poultry plays a small part in their menu. They are more beneficial to the farmer than are the Hawks, and, consequently, there is even less reason for their destruction. They are, for the most part, dwellers of the deep woods, where the browns and grays of their plumage aid them in concealment. The eggs of all varieties are white. Of the nearly two hundred species known throughout the world about twenty are found in the United States, and eight or nine are common in the Eastern States.

Screech Owl. This small Owl, the most common of the family, is well known from the weird, unearthly cry which startles not a little one who is unfamiliar with it. During July and August, after the young are reared, their cry is often heard in the open country, for they frequently build their nests in outbuildings of the farm, or in a hollow tree in the orchard. Often in the daytime one will see this Owl sitting on some

low perch, blinking in the sun as though much bewildered. Not long since, I approached one within arm's length as he sat on a low tree, and was about to seize him when he took sudden flight.

Among Screech Owls there is a wide difference in coloring not easy to explain. Some are gray; others in the same brood may be distinctly brown. The back is minutely streaked and spotted with gray or reddish-brown and black. The under parts are grayish, streaked with brown and black. There are two tufts of dark feathers, like ears, and the large eyes are yellow. They are about ten inches long. They range over the Eastern States, rarely as far north as Maine, and are resident throughout. They destroy many mice, grasshoppers, crickets, beetles and other insects.

Saw-whet Owls. This Owl also derives its name from its peculiar cry which much resembles the sounds made in filing a saw. It is the smallest of our common Owls, only eight inches in length. It is a dweller of the woods, with a more northern range than the Screech Owl, and it moves southward in the winter, in search of food, but is not regarded as a migrant. I have often found them about deserted logging-camps in the woods of Maine, where they are common in summer.

The Saw-whet Owl's upper parts are cinnamon-brown, with the head, back and tail streaked and spotted with white. The under parts are white streaked with brown. The feet and legs are covered with brownish-white

BARRED OWL

feathers. The eyes are yellow and there are no ear tufts. They usually nest in hollow trees, a deserted Woodpecker hole being a favorite place. Their food consists of mice and other rodents, insects of various kinds, and small birds.

Barred Owl. A common resident in wooded regions is the Barred, or Hoot Owl, a name which arises from his cry, which comes at night from his forest retreat. "*Whoo-whoo; whoo-whoo; whoo-whoo-ah,*" he calls, often repeating the cry at intervals through the night. In my boyhood the belief was that the call of the Hoot Owl betokened rain, but I am not at all sure that he is a safe prognosticator of the weather. Many a time in the darkest nights we heard this weird interrogation from the dark woods on Sailor's Island, and no doubt it was more distinctly audible in the calm before a storm.

This is a good-sized bird, twenty inches in length. The upper parts are grayish brown. The fine bars of black and dark brown which are seen on the back, neck, rump, tail and breast give him the name Barred Owl. The sides and belly are broadly streaked with brown and the legs and feet are feathered to the toes. There are no ear tufts and the eyes are black, in this particular differing from all other members of the family. The large, hooked bill is ivory-white. Their home is usually in a hollow tree, or the abandoned nest of Hawk or Crow. They feed upon poultry, game-birds, mice, frogs, lizards, insects, etc. This Owl ranges over eastern North America as far north as Newfoundland and is a permanent resident, except in the extreme northern portion.

Long-eared Owl. In size this Owl is midway between the Screech Owl and the Barred, being about fifteen inches long. The best field mark is the long tufts, or ears, of black bordered by white or buffy. The upper parts are dusky mottled with white and buff. The tail has several cross bars of dark brown. The under parts are white and buff, streaked and barred with brown.

This Owl, too, is a dweller in the dense evergreen woods and it is said hunts only at night. In the daytime it sits quietly in some thicket and may be approached close enough to have its picture taken. It usually lays its eggs in an old nest of Hawk, Crow or squirrel. They are permanent residents as far north as Nova Scotia, but are not common in the northern part of this region.

Short-eared Owl. This Owl is a daylight hunter and a resident of marsh and meadow. He remains so still in his grassy retreat that you almost step on him before he stirs. When in quest of food he courses back and forth over the meadows in search of mice of which he is very fond. The nest of grasses is built on the ground.

They vary in length from fourteen to seventeen inches. The back, wings, head, neck and tail are mottled black, brown and gray. The white under parts are streaked with brown. There are two small ear tufts of dark, edged with white. They are found throughout North America, breeding north of Virginia.

Great Gray Owl. This very large Owl lives north of the United States and comes down to

us occasionally in winter. It is a rare bird and is growing scarcer. It is twenty-seven inches long. The upper parts are dark brown mottled with white; the under parts white, streaked on the breast and belly with brown.

Snowy Owl. The Snowy Owl is a northern dweller, nesting from Labrador northward, and coming to the United States only in winter, when the food supply there is lessened by the cold and deep snows. During some winters the flight is numerous; at other times there are only stragglers. This Owl is a daylight hunter, and his habits are not unlike those of some Hawks. From a commanding perch he will swoop down upon a ground-dwelling creature, luckless rabbit, squirrel or weasel that chances under his gleaming eyes; or boldly he will launch out to overhaul Grouse, Pigeon, or other bird. Their prowess as hunters of hares has given them in Sweden the name *Harfang* or Harecatcher.

During these winter invasions they are even more plentiful on the seashore than inland, for they are skillful fishermen. Swooping down from a perch that overhangs the water, this fisher, like the Osprey, grips the fish in his strong claws, then eats it at leisure on some near-by stub.

The Snowy Owl is more than two feet long. Like all dwellers of the far North, the prevailing tone is white. There are bars of brown larger and more numerous on the female and young. Their feet and legs are covered with thick, warm feathers, excellent protection against extreme cold.

Chapter XV

THE WILDERNESS IN JUNE

"Now is the high tide of the year,

. . . . . .

Its arms outstretched, the druid wood
Waits with its benedicite."

—Lowell.

Part I

For the greater part of June I have been living in a snug cabin built of peeled spruce logs and roofed with splits of cedar, one of a dozen similarly constructed, set in a small clearing in the heart of the forest. To the north and south, ten miles or more in either direction, stretches away a little valley, well protected to the east and west by the massive bulk of mountains.

Some four miles to the northwest of my cabin rises the towering form of Mt. Baker. Its lower slopes are clad in the cheerful green of beech and maple, birch and poplar, but the steep sides and summit display the more somber shades of spruce and fir. On the hither side from crest to base extends a deep scar with surface torn and barren, except for straggling ricks of green bushes, Nature's attempt to hide the wound. Years ago an avalanche swept away trees and earth, and, gaining momentum as it plunged downward, ploughed deep into the mountain

SECOND POND, SHOWING MT. BAKER

side, even laying bare the granite ribs. The forces of Nature here displayed their might, and centuries will scarcely repair the damage done in a moment.

When the air is clear the slide seems near at hand and every detail of its ragged face is seen distinctly; but when the mists gather, and at twilight, it appears indistinct and far away as though receding in the uncertain light, a fitting playground, you would say, for the giant spirits with which the Indians in the old days were wont to people these lonely mountains.

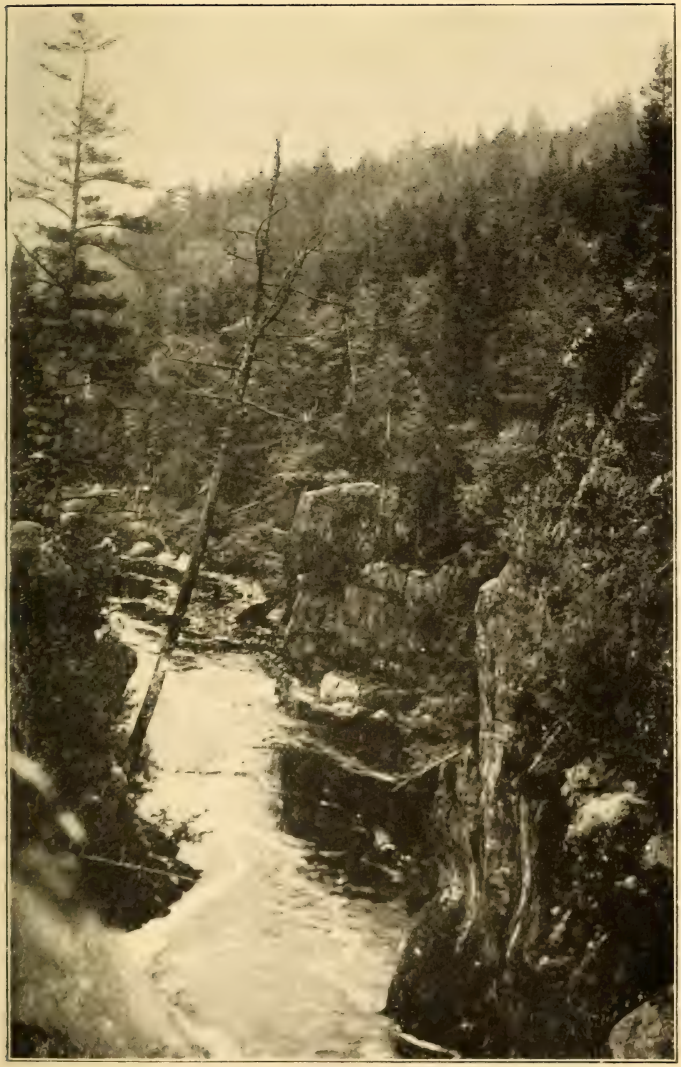
To the left of Baker and reaching well around into the west rises the lesser height of Big Elephant, its name suggested by the peculiar outline of the long summit. Just below appear the rugged forms of the Indians, Big and Little, with Chairback well to the south. The entire range is thickly clad with coniferous trees, forming a ponderous wall of sheltering green. To the east the valley is also protected by a long range, low to the south but rising higher and higher in each succeeding peak until in the northeast it culminates in the lofty crest of White Cap, a grand and symmetrical mountain, its gracefully sloping sides surmounted by a shining rock mass which gives its name.

Through the valley thus guarded, in winding course, flows a small river, at the nearest point scarcely a hundred yards distant from the clearing. This stream varies much in character. For long stretches the current moves sluggishly, with deep pools here and there, dark and mysterious from the dense shade of the overhanging

forest; again it hurries down some long incline, rippling and gurgling good-naturedly over its pebble-strewn bed; then gathering itself, it plunges grandly downward, roaring and seething in its haste. This stream has been fittingly named the Pleasant River.

Stretching away on all sides is the vast forest threaded by numerous trails, some made by man in his restless search for its wily denizens, others by the wild folk themselves in the countless years since first it became their abode. Moose and deer, bear and lynx range its sheltering depths, and many smaller animals here find that degree of solitude which they desire in a permanent abiding place.

At times these wild folk from the thickets look out upon us, curious as to the character of the strange beings who dare to invade their haunts. Often when twilight steals over the forest in the little clearing is heard the blowing of a startled deer, as he catches the scent of smoke from the smudge fires quite necessary at this season of the year, if one is to enjoy by day or night even a partial relief from the attack of myriads of insects. One evening as darkness was falling a moose stalked stolidly out of the woods, and, passing between the cabins, halted for a moment in the garden, evidently considering the prospects for future feasts, then silently passed into the gloom again. Now and then a hedgehog in broad day pays us a visit, slowly and ponderously working his way along the trail; and he, too, vanishes into the forest. From the many tracks seen in the soft earth,



PLEASANT RIVER

other of the wild folk look out upon us, but their instinctive wariness keeps them within the shelter of the thicket.

Five minutes' walk from the clearing is a small pond, a dozen acres or so in extent, its low shores bordered with a rank growth of reeds and sedge-grass. This is known as First Pond and in summer is a favorite haunt of deer that seek relief in the cool water from the attack of flies and gnats while feeding upon the lush grasses and tender twigs along its shores.

Just beyond First Pond, and reached by a trail leading over a spruce ridge, is another pond much larger but very shallow throughout the greater part of its extent. This is known as Second Pond and is a favorite feeding ground for moose. So secluded is it that during all hours of the day they venture to wade far out, greedily tearing from the bottom the great roots of the yellow lily that there grows in profusion. The waters of both ponds and the river are inhabited by many trout which are eagerly sought by such disciples of the rod as make their way to this sylvan retreat.

Here, too, dwell many feathered folk—permanent residents accustomed to a life remote from the regular haunts of men, and summer visitors, many of whom have journeyed from the far distant tropics in search of a secluded nesting ground. On my arrival in early June I was much impressed by the great number of birds, and also by the many strangers of which I had caught but a fleeting glimpse, or had not seen at all in my observation during the migration

at my home two hundred miles south. Evidently they had slipped by unseen at night, or in the shelter of the woods.

Straggling representatives of several familiar varieties of the open country are here, but some of them seem much changed and, in a way, out of place so far in the deep forest. Our old friend, the Robin, is about, but he has lost much of the vivacity and cheerfulness which characterize him in the open country. A pair is nesting in a small fir within ten feet of my cabin, and in the early morning I hear them running on the roof just above my head. But they are strangely silent and even when I approach the nest their protests are feeble and half-hearted. Not once have I heard their jolly rain song. Occasionally they gather on the green before the door for a brief frolic, but there is a lacking evidence of that deep sense of contentment which one usually observes in this domestic bird during the nesting season.

A pair of Bluebirds has chosen a deserted Woodpecker's hole not far away and they, too, seem to be depressed by the gloom of the wilderness. Only rarely do I hear a note from this usually joyous singer, the plaintive "*far-a-way, far-a-way*" that is oftener heard in the autumn. A solitary pair of Song Sparrows is nesting in the clearing, but I have not been able to exactly locate their home. Very rarely do I hear their song, and then it is poorly executed, spiritless, and cut short several notes. They seem to have lost the sublime courage and light-heartedness which we are accustomed to associate with

these faithful friends of man, and I fear that even their great optimism is here sadly shaken.

In a little house set at the end of a stout pole erected on the ridge of the log barn, Tree Swallows are rearing their young, and they appear very happy and quite at home in these surroundings. Their ancestors not many generations ago were forest dwellers, nesting in hollow trees; so perhaps their racial love for solitude has not become wholly extinct, even though they are glad to accept the proffer of so cozy a home. Every minute of the day they appear to be seeking food for their nestlings, their cheery low-voiced warbles expressing deep domestic joy. I see so many of these birds about the woods that I am sure they still resort to their primitive nesting places, although I have not been able to find them.

Many Chimney Swifts dart merrily about, now over the forest, now skimming the surface of pond and river, their rapidly uttered twitters giving no suggestion of depressed spirits, although here no wide-mouthed chimneys invite them to make a home in their sooty depths.

To be sure, in several unoccupied cabins they have invaded the stovepipes which serve in lieu of chimneys, but their nest building efforts there soon come to naught, as they are unable to securely fasten the material to the smooth, curved surface of the iron pipe. In consequence, after a hard rain the nests will be found in the little air-tight stoves. These birds, too, resort to hollow trees, and it is not an unusual sight to see them rising in a black line from the depths

of some decaying monarch which evidently affords a secure nesting place for many pairs of these "denizens of the dark."

Several varieties that I have observed farther south as rather silent, restless travelers during migration here seem to have found the environment which develops the gayer side of their natures, for they have become the merriest minstrels, enlivening the long summer day with happy song. Purple Finches that I know in the open country for the most part as stragglers here display new phases of character, being both friendly and sociable.

The males are seen in bands roaming about the edges of the clearing, a common rendezvous being the tops of the rock maples where they greedily feed upon the kernels of the queer, wing-shaped seeds. Keen hunger well satisfied, they burst forth in rollicking song, sometimes in a series of solos, again in a chorus which is charming beyond the possibilities of description. The wonderful volume and richness of their carelessly flowing warbles are quite new to me. And while I have long regarded them as among our most delightful singers, here they far excel in quality of note and vivacity of execution their usual exquisite song; and frequently I hear several additional notes quite unknown to me. The post-prandial concert over, away they go to the woods and soon their sparrow-like mates are seen silently foraging. They nest in the firs and spruces which fringe the clearing and are our constant and much admired entertainers.

Many dapper little Chipping Sparrows are about the clearing, very busy just now with their domestic affairs. They must be put to some trouble to find horsehair enough to line their numerous nests, for there are but two horses here and most of their time is spent on the tote-road to and from the settlement. Perhaps they seek the same source of supply as did the Junco whose ground-built nest was discovered by accident.

One day while searching for a Warbler whose song puzzled me, a Junco came from the near-by thicket, bearing in her bill a strange-looking burden, a wisp of something which projected on either side like the feelers of a cat, having much the appearance of snow-white silk floss. Wholly devoid of fear, she lighted in a small fir within arm's length, then from limb to limb descending to the ground, disappeared in the thick ferns. In a few moments she flew away and a brief search revealed a well-built, cup-like nest lined with crinkly white hair from a deer's tail! The effect of this dainty lining against the dark material of the nest was very odd, you may be sure. Was not this an excellent illustration of the versatility of these little friends of ours in adapting the objects at hand to their needs?

Each daily visit to the nest revealed an additional egg until there were four, pure white, thickly sprinkled with tiny brown spots. The absolute silence of the bird as I approached the nest seemed quite unusual. Not once when disturbed did she utter a note, either of alarm or curiosity, but sat quite still until my hand was

almost upon her. Then she slipped silently into the low limbs of her roof tree, watching me closely but trustfully, as though convinced that my visit was prompted by friendly interest rather than ill-will. At all hours of the day, on every hand, are heard the happy trills and warbles of the Juncos, unmistakable signs of contented hearts filled with the joy of life.

There are about the clearing three varieties of the Thrush family besides the Robin, all solitary and much more retiring in their habits than when seen during migration. The wonderful song of the Veery and the scarcely less charming performance of the Olive-backed are heard during all hours of the day, floating softly out from the dense shade of the fir thickets, where the gloom of twilight always prevails.

If one invades the dark depths to call upon these sober-clad recluses, he is greeted by rather harsh call notes, and catches a glimpse of shadowy forms flitting down the dusky aisles in the half light; and silence reigns for a long time. But if he is able to withstand the attack of hosts of mosquitoes and black flies, and waits patiently and very quietly, the sweet strains will be taken up again, and so near at hand that there will be heard certain preliminary undertones, not audible except at close range. Hearing no sound of the Hermit for the first ten days of my sojourn, I concluded that he had not penetrated so far inland; but at sunset one evening while fishing in Second Pond his song came floating out to me, perfectly voiced, divine, entrancing. After that I was more content in my forest haven.

Were I asked what woodland dweller seen during my stay here seems happiest, I should name the male White-throat. Perched on the topmost twig of a fir, the lower branches of which shelter his mate as she patiently sits on the five bluish-white, brown-speckled eggs, he seems the very embodiment of earthly bliss. His abiding faith in the happy outcome of his mate's tender care has given a full rich tone to his song that is quite a surprise to me. Much as I have admired the plaintively sweet song of this bird during migration, I was quite unprepared for this delicious performance of the nesting season. So sweetly confiding and trustful are his notes that one feels them the frank expression of the deepest sentiments of the heart. To my mind there are few sweeter utterances in all bird land than the nuptial song of the White-throat.

They are all about the clearing and along the trails where bordered with fir and spruce. Their call notes, the metallic "*chink*" and a shrill "*pit*" are very familiar sounds as I move about, but they show no sign of fear, often permitting me to pass within arm's length of them. They are among the most admired and lovable members of the wilderness chorus.

But even in this paradise of song all sounds do not express harmony. In truth there is one discordant operator in a coat of shiny black, a color in which, as you have noted, are clad many of the mischief-makers of the bird world. Soon after my arrival there were heard in the alders bordering the outlet to First Pond, reedy call notes and a poor imitation of the ringing

"*hard-a-lee*" of the Red-wing. Following up these sounds I traced them to a nesting colony of Rusty Blackbirds, a species whose northward passage I had noted in late April.

The nests of twigs and coarse grass, rather poorly constructed, were placed in fir and cedar trees along the banks of the stream, some near the ground, others twenty feet or more above it. The fledglings were nearly grown, and rarely have I experienced a more strenuous or persistent attack of parent bird whose domestic affairs I have looked into. A few days later when the young were making their first attempts at flying I came upon them again on the up-river trail, and so violent was the attack of the old birds that for a time I thought I should have to seek some weapon of defence. Right at my face they darted, uttering very harsh and disagreeable sounds. Following me for a long distance, they finally settled in the treetops where they could still watch my movements.

Afterward whenever I set out in that direction, almost before leaving the clearing, the alarm notes of these black disturbers of the peace were heard, and soon a small band came and followed me for a quarter of a mile along the trail, uttering such a jargon as to completely drown all other bird notes. Then, perched on the dead trees, for half an hour they kept up their excited chatter.

One day, quite out of patience with their noisy demonstrations, I sat down and deliberately waited to see what they would do about it. On near-by stubs, all the while displaying their

ill temper, they sat so long that my patience was exhausted. Occasionally one would snap at a passing insect, and once a male made a clumsy effort at a dragon fly but was unsuccessful. At the end of an hour I left them, but their noise did not cease until after I entered the clearing on the return to my cabin.

There is little about these birds at any time that is attractive, either in the coal-black dress of the male, their yellow eyes, or hateful alarm notes. The fine slate-color of the female, however, is rather handsome and did she display more amiability she would not be wholly objectionable as a neighbor. The name arises from the dingy tone their plumage assumes after the breeding season is over.

Toward the end of June the Rusty Blackbirds developed a novel and interesting habit, that of walking about on the pads of the yellow lilies which cover much of the surface of First Pond. Dry shod they demurely move about on this carpet of glossy green, now and again spreading their wings for a long jump from pad to pad, busily feeding upon the multitude of gnats and flies which infest the blossoms. At a distance they have all the appearance of walking on the water. Judging from the rapidity of their feeding here, they have little need to look elsewhere for their daily rations. This no doubt accounts for the recent gathering of the nearly grown young in the alder thickets which border the pond to the southeast, a locality very convenient to this bountiful food supply.

Part II

"I have heard of thee by the hearing of the ear; but now mine eye seeth thee."—Old Testament.

If with diligence and patience you have long searched for something upon the finding of which your heart has been firmly set, or, if striving earnestly to accomplish a certain result you have at times almost succeeded, only to taste the bitterness of defeat again and again, and at last most unexpectedly and without effort upon your part have suddenly reached the goal of your desires, then will you realize something of the deep sense of victory which came to me at an early hour on a recent morning.

An earnest wish to hear the wonderful nesting song of the Winter Wren has possessed me for many years. In fact this desire had its inception one evening some twenty years ago when a friend, a trained naturalist and ardent bird lover, in words aglow with the delight of the recent experience, described his impressions of the lay of this woodland sprite. He related how, while fishing a remote stream in the north woods, there came from the thicket to his attentive ear notes so entrancing, so much in keeping with the wildness of the spot that, dropping his rod, he followed its elusive source in and out through the dense growth, losing all sense of direction but gaining a notable victory in identifying the singer. He declared this song unexcelled in variety of notes among our Northern birds.

On the evening of my arrival here, among the many songs that greeted me was one that instantly attracted my attention as being unfamiliar, remarkable for the variety of its notes. It was so unlike all the utterances of the numerous Warblers about the clearing that an intense desire seized me to immediately identify this woodland wonder. Such was the beginning of a search that lasted many days.

In the attempt to identify this bird, daily trips were made, sometimes covering several miles, and never did I return without having heard the song, but the singer eluded my sight. Yet they were numerous, and at times one sang just back of my cabin; but when I entered the thicket he at once withdrew, slowly retreating as I advanced until after an hour's tramp in the tangled maze, I gave up the quest and sat down with the hope that he would return within range of my vision. He returned, but by another route, and again I was baffled.

One day while fishing the river, the elusive melody came from the far shore and I thought that this time he could not possibly escape me, for the mountain rose almost sheer from the river bank. Quickly wading the stream I approached the spot whence the sound had issued, and after a moment's silence, from far up the steep cliff floated down the tantalizing song. Along the trail, by the pond site, up river and down, in short, wherever there is a tangle of cedar, mountain ash, and swamp maple, I heard him, but so successfully did he escape my eager search that not even a glimpse of him did

I get; and at times I almost came to believe him a sprite, a voice without material form.

Then most unexpectedly, and without effort, I came upon him. Soon after sunrise one morning, while paying my daily visit to a mineral spring that bubbles out of the river bank just below the dam, I heard the song and my heart fairly leaped at the prospect of seeing the singer, for it seemed impossible for him to escape me here. As I breathlessly waited a moment, there came into view, hopping along a projecting limb with a peculiar bobbing motion, a midget in brown, with tail so erect that there was no mistaking him.

He was the Winter Wren, the dainty minstrel I had so long sought. For a moment he sang for me in plain sight, then flew across the stream. But my search was over and the reward was equal to the protracted effort I had put forth, absolute knowledge gained where there had been so much uncertainty, and so I added a new and highly prized acquaintance to my list of bird friends.

But how shall I describe his marvelous song, it is so different from all others! There is a quality about it, a certain spirit of the wild, that suggests the song of the Ruby-crowned Kinglet, but, after all, the resemblance is slight. The song of the Winter Wren is like a cascade of pure liquid notes gurgling and tumbling forth as though the tiny mite, in utter abandon, were intoxicated with the ecstasy of his own melody. In the variety of the notes the song is to me incomparable. And from such a midget! One old guide

who knows him well calls him the "crazy bird."

North of the clearing, and traversed by the trail to First Pond, is a tract a score or more acres in extent, where several years ago fire killed the timber. A thick second growth of birch, wild cherry, alder, etc., has sprung up, above which rise stark and bare many stubs, relics of the old forest. Here the Woodpeckers find favorable feeding and nesting ground, and also many followers of this family of wood cutters who take advantage of the generosity of such skilled workmen. Not only do the Hairy, Downy and Flicker nest here, but Chickadees, Nuthatches and Bluebirds have taken possession of the well-cut holes, evidently finding them quite suited to their needs.

Very soon after arriving here my attention was attracted by a faint chorus of squeaks coming from the direction of a dead birch on the edge of the clearing. A brief search revealed a clean-cut hole, some forty feet from the ground, from which issued the sounds. Soon with a shrill "*perk, perk,*" the father of the family, a Hairy Woodpecker, came bounding up with beak well laden with choice grubs, paused for an instant just beneath the hole to look at me, then with a note of reassurance to his waiting brood, disappeared into the hole. At his entrance the faint cries instantly developed into hungry calls. Soon out he came and, with a farewell "*perk,*" disappeared into the forest. Almost immediately came the female, also with a goodly bunch of grubs, and again the cries increased to a din while she fed the eager nestlings.

Rarely have I seen among birds greater evidence of domestic happiness. Often while one is feeding the fledglings, the other will arrive and await on a neighboring limb his turn in this oft-repeated process. Then are heard low chuckles, soft and affectionate, language which I have never before discovered in the Woodpecker vocabulary. For some time they seem to talk over their household affairs in tones of great amiability, perhaps discussing the remarkable growth of their interesting youngsters, the naming of the different members, when their education shall begin, and various other important affairs. Then away they go to take up the food problem again.

After observing their goings and comings for several days I have concluded that the amount of food required by a family of young Hairies is nothing short of marvelous. On an average, one of the parents returns every five minutes, and I see them plying back and forth during all the hours of daylight. The loud "*rat-a-tat-tat*" of one or both is nearly always audible in the clearing, and the fledglings must be growing rapidly.

In a few days black and white heads appeared in the doorway and the approach of a parent was the signal for an eager outstretching of necks. Their voices grew in volume with their bodies and the faint squeaks became a jargon of hungry shrieks.

Anxiously I awaited the day when the young would leave their sheltering roof trees for their first instructions in flying, tree clinging, wood

cutting, and the many important matters that go to make up Woodpecker education.

But alas for my expectations! Their departure was by night, when quietly the whole brood slipped into the forest, and not even a glimpse of the youngsters have I had, although the old birds are still seen about the clearing.

The father of this family seems to be something of a humorist In the early morning he often mounts to the roof of a cabin and beats a lively tattoo on the dry splits which project a foot or more above the ridge. The reverberations of the resonant wood echo about the clearing, to the great annoyance of the sleepy folk. This can hardly be a search for grubs, since the splits are dry as bone and without bark. He seems to greatly enjoy the joke, for between the rolls he halts for a moment, chuckles to himself, then repeats the tattoo.

One day while sitting in the shade of a cabin veranda he came to one of the cedar posts within six feet of me and although his bill seemed stuffed full of grubs and insects he carefully inspected the loose bark for trace of another. The wonder was how he could drill for more when already his bill was so well filled; but, not finding one, he flew away and my curiosity was then unsatisfied. A few days later he lit on a dead spruce just above my head, deposited his load of bugs in a deep crevice of the bark, quickly drilled out a borer gathered up his cached food and hurried home with his fine load. Never have I watched a busier pair of birds, and were I to select a new emblem to represent industry, I

would choose the Hairy Woodpecker when caring for the brood rather than the honey bee.

In my excursions about the wood I have been surprised at the number of Woodpecker families discovered, their holes being usually located by the hungry cries of the young. Homes of Flickers, Downies, Hairies, American Three-toed Woodpeckers and Sapsuckers have been found, all with the entrance facing the east. May not this location of the front door be due to a desire to catch the first ray of light as morning breaks in the forest?

Among the dead trunks surrounding an isolated pond, I heard the loud blows and startling cries of the "Cock of the Woods"; but as the day was far advanced and the trail home a long one it was not deemed wise to hunt his nest. The sight of this bird is always for me an event in any bird-hunting day. Although once common, it is now to be considered as rare, except in the deepest forest.

Many other birds besides the Woodpeckers find conditions in the old stub lot greatly to their liking, the Flycatchers in particular being much in evidence. The shrill interrogatory of the Crested is often heard. For an hour after daybreak each morning his persistent cry is very prominent in the bird chorus. This habit has occasioned dark threats to be made against this unseemly disturber, as he is regarded by the sleepy folk, threats even involving his destruction unless he reforms forthwith. From his lookout on the top of some prominent stub the Olive-sided Flycatcher calmly surveys the scene

and between his frequent flycatching forays pipes his mellow "*pu-pit, pu-pit, pu-pit,*" with something of the tone quality heard in the more attractive utterance of his cousin. the Wood Pewee.

Quite in contrast to the air of self-possession which characterizes the Olive-sided is the nervous, excitable manner of the Sebec, a bird that is very numerous here. There is little about these least of the Flycatchers that attracts one, either in note or habit. Of late along the river bank have been heard the calls of the Alder Flycatcher. On a low perch he utters a cry which sounds much like "*eaze-we-up, eaze-we-up,*" rather wheezy in character and less emphatic than Sebec's call. Like all the family, he is a well-dressed bird, easily known by the pure throat and center of the breast, and two promident wing bars.

I have been much surprised at the number of Humming Birds which are summering amid the desolation of the stub lot. Rarely do I traverse the trail to First Pond without seeing several perched on dead limb or broken bole of fir or pine. Like tiny sentinels they detect the first approach of danger to their thimble-like homes, so securely hidden in the green moss below this favorite perch that I have not been able to find one, although the search has been both frequent and protracted. As they turn about to keep me well in view, their green backs gleam in the sunlight with the sheen of silk, and their throats flash like rubies. At times several will be seen darting about hither and thither like bees, with

a very rapid twitter much like that of the Chimney Swift, but fainter. This tiny creature always excites my intense admiration. Think for a moment of the great distance he covers twice a year between this forest home and his winter abode in the tropics. The explanation is beyond man's knowledge. Little or nothing is known about his travels, except that he is seen in his winter home, then appears amid the June flowers of the north, even in Canada. Of this large exclusively American family the Ruby-throat is the only species that comes to us in eastern North America.

Once while watching an Olive-sided Flycatcher perched on a stub, I saw a Humming Bird dart at him full tilt, striking him in the back of the head. Like a flash the Flycatcher turned and, snapping at the midget, caught him by a wing and held him for an instant, when he pulled away with a rattling twitter and sought a perch near me. There he sat for a time, smoothing out his rumpled feathers, occasionally looking across at the Flycatcher with what seemed to be sort of a got-more-than-I-bargained-for air. I am somewhat puzzled as to their food supply here, for flowers are not plentiful. I believe they, too, have taken up flycatching.

Although today is the last of June, the Cherry Birds are still in flocks, and they spend much time among the old stubs. They are graceful flycatchers, not so rapid in movement as are many birds, but with a precision and ease that is quite pleasing to behold. They never seem to

lose a certain air of refinement and elegance, and one feels that the delicate colors of their dainty dress and their faint lisping notes are quite in harmony with their characters. They are very tame, frequently keeping me company along the trail, and so gentle are they I can scarcely imagine their uttering a harsh or discordant note. Sometimes it occurs to one that as the season is slipping by so rapidly they should be warned against the dangers of further delay in rearing the broods.

A bird that vexed me not a little during the early part of my stay was the Pine Siskin, or Pine Finch. They frequented the thick grass plot between the cabins, feeding on the blossoms of the dandelion. At my approach they would rise with notes very much like those of the Goldfinch; in fact, because of the great similarity in notes, size and flight, I was nearly convinced that they were female Goldfinches, accounting for the slight difference in plumage as resulting from the process of moulting, although it was much earlier than the season when birds usually change their clothes. On close observation however, notes were heard discordant and repulsive as those of a Catbird, so unlike the utterances of the little cavalier in black and gold that the matter was at once decided, and their real identity discovered. They are nesting in the fir thicket that borders the clearing on the south, the nests being made of twigs and rootlets, lined with plant down.

Ruffed Grouse. Not far from the clearing the up-river trail crosses a slight eminence where

the soil is sandy and dry. Here a mother Grouse and her family take their daily dust bath, and I have often tried to catch them at this interesting and necessary process. Several times I have met them about the trails and their movements are always amusing. The young are now about the size of two-weeks-old chickens, and, when alarmed, some fly with a directness and precision which suggests the wonderful powers of flight they will a little later attain; others hide in the leaves and moss, the mother meanwhile gliding about with a peculiar noise much like the whining of a puppy. But if I conceal myself they quickly assemble again and the search for food goes on. This is the Canadian Ruffed Grouse, a bird which differs from the Ruffed Grouse found further south, having the bars on the under parts more distinct and a decided grayish tone instead of rufous above. So far as I have been able to observe, the only difference between this sub-variety and his well known brother, the Ruffed Grouse of New England and the Middle States, is the slight variation in color. In mating and nesting habits, pose, form and flight, they are exactly alike. As happens in the case of nearly all dwellers of deep woods away from the daily haunts of man, the northern variety is very tame, more like barnyard fowl than game birds of the woods. This year at the foot of Mt. Katahdin, near the end of August, we came upon a flock, the young well grown and so tame that we could have hit them with our climbing sticks. They did not fly, but after walking about and eyeing us

sharply for a time to satisfy their curiosity, went on with their feeding, gradually working away. What a contrast to the habits of the Grouse in the second-growth woods about my home! There they are so wild that often one does not see them at all, their presence being known only by a booming of wings as they go hurtling through the trees to some distant place of safety. We have no better example of the change that takes place in birds that have been pursued for generations by the man with dog and gun.

So beset with constant danger are these sturdy denizens that the wonder is they have not been completely exterminated. The hunter is but one of their many menaces. As they are in the main ground dwellers, they are fair game for fox, mink, weasel, black cat and other prowlers of the dark that are as fond of the delicate flavor of Grouse breast as are the gun-bearing epicures. Nor are Owls and Hawks wholly devoid of a taste for this delectable creature. And this is not all. Probably the greatest danger Grouse face is from an entirely different source. During the long winter, when the snows are deep and soft, they often seek shelter from the terrible cold by plunging deep into the feathery mass, which, closing over them, protects them from the biting blast. It often happens that while thus imprisoned, a sudden change of temperature is followed by rain which softens the snow. Freezing weather then sets in, forming a hard crust which renders escape for the poor bird impossible. From this cause alone, many perish every year.

The Grouse are the drummers of the bird orchestra. To my ears one of the most fascinating of spring sounds is the muffled roll of the Cock, to be compared in interest with the frog chorus and the song of the first Robin. Beginning slowly and deliberately, it increases in rapidity until it is almost a continuous sound, a mellow, reverberating reveille, heard at all hours of the day and night during the months of spring. A pleasant boyhood memory is of the Ruffed Grouses' roll during the midnight hours, booming across the river from the dark forest that then clothed Sailor's Island. To my youthful imagination it called up many fanciful pictures of wood nymphs and fairies, always, however, of a pleasant nature.

Formerly there were many theories about the manner in which these drum beats are produced. The most common explanation was that the cock bird stood on a hollow log which he beat with his wings with varying rapidity. It is now definitely known that standing on any object that will render him most conspicuous, stump, log, rock or mound of earth, he beats the air with great vigor. The purpose of this is to attract the female bird, as the Woodpecker drums up his mate by beating a lively tattoo on some resonant limb, and the songster by his vocal utterances. The Grouse, possessing no vocal powers, resorts to this unique but no less effective method.

Spruce Grouse. The Canadian Spruce Grouse, or Spruce Partridge as it is sometimes called, is a resident of the deep black forests,

and is becoming scarce even in remote regions. It is somewhat smaller than the Ruffed Gourse, with plumage much darker. The male has a bright red line over the eye. On the up-river trail one day I came upon a flock of these birds so tame as to appear very stupid. Not until I switched them with the stick in my hand did they show any desire to move away, and then they hopped into the low branches of the trees bordering the trail, still stupidly eyeing me.

Indian Joe tells me that the Spruce Partridge drums only when on the wing while descending from some high perch to the ground. This I am not able to verify from personal observation, but Mr. Knight, in "Birds of Maine," speaks of this habit.

Part III

"Just a day on Nature's heart."

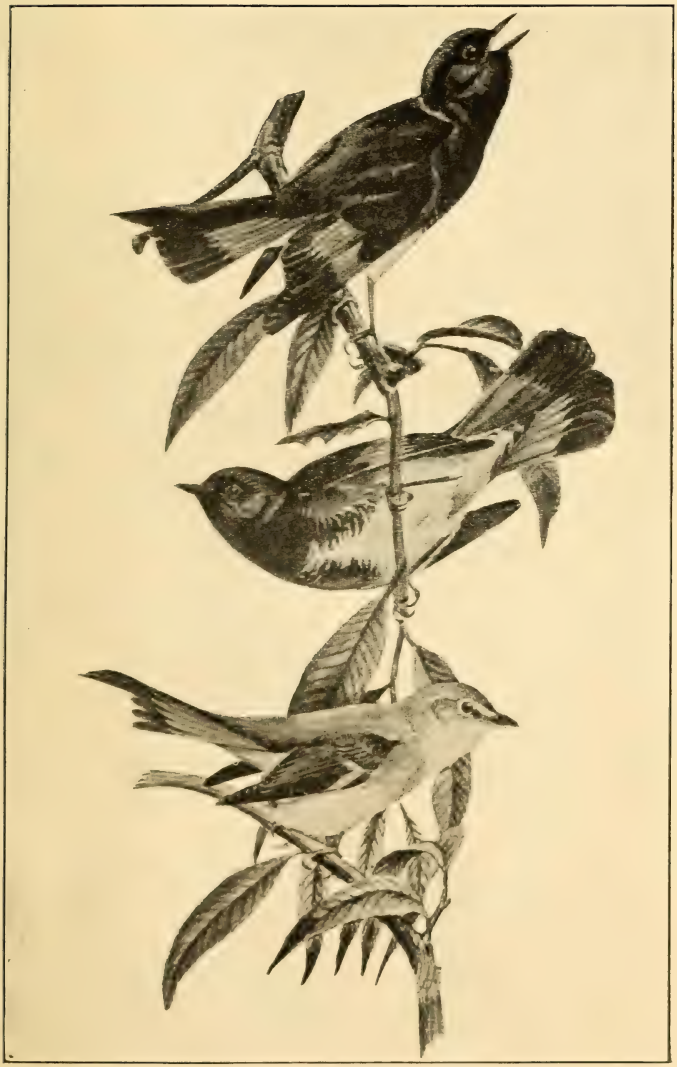
— Van Dyke.

To the northwest of the clearing some three miles as the Ducks fly, farther by the well defined woodland trail which leads across the shoulder of Big Indian, is a clear blue lake in whose unruffled surface are mirrored the massive forms of Big Elephant and Baker, which like stern dark sentinels guard this wilderness gem in its setting of unbroken forest. Its shape has given it the name of Horseshoe Lake, and the few who have penetrated to its peaceful solitude, know it as the abiding place of many richly colored trout of goodly size that rise eagerly at all hours of the day, in sunshine and

storm, to the deftly cast fly. So to the fisherman's mind, at least, its naming for the emblem of good luck is both wise and apt.

Partly to fill a creel with trout, partly to extend my acquaintance among the wild folk of the region, I set out early one morning with rod, field glass and camera, bound for this "paradise of the woods." The trail starts from the far side of First Pond, and, as I embark to paddle across, from all sides the White-throats greet me with their morning melody, a message of peace and good cheer. As I enter the dense forest a red squirrel noisily salutes me, halts for an instant in his lively scramble up a spruce trunk, eyeing me furtively; then, scurrying to a limb, settles down comfortably to await developments. His summer coat is several shades darker than his winter garb, but he is the same restless, rollicking alarmist, no matter what the season.

From the narrow belt of black growth which borders the pond, the trail gradually ascends and the character of the forest changes completely. Fir, spruce and cedar give way to beech, maple, white and yellow birch, with a sprinkling of ash and poplar here and there. This is the primeval forest and never has the white man's axe awakened its echoes except as trapper or surveyor has blazed his trail or built his campfire. The ground is thickly clad with a low growth of moose-wood and hobble-bush, and many flowering plants deck the borders of the path. Overhead the lofty roof of green is so dense from the intermingling of the thickly-



AMERICAN REDSTART

foliaged branches that the sun rays scarcely penetrate. The result is a subdued atmosphere, a half light as it were, in which the large boles stand grim and gray like the towering columns of some ancient temple. The general effect is that of a vast park in which one's range of vision is unobstructed for long distances.

From the start my presence is signaled by bird notes. In the lower reaches of the trail Veery and Olive-backed Thrush announce my coming by call notes somewhat inquisitive if not altogether interrogative, and I catch occasional glimpses of their sober-clad forms as they silently change positions, the better to inspect the intruder. Then a Chickadee cheerily declares his identity, and if I am not mistaken, there is a note of welcome in his strain. A Redstart quickly voices the alarm, a Magnolia Warbler pipes his musical lay, and there come to my ear the droning notes of the Black-throated Green, more melodious than the utterances of many of his numerous relatives. The news of my coming is proclaimed from treetop to treetop by these feathered sentinels as I advance, and there comes to mind the old signal towers along the rocky headlands of the Spanish Coast from which the Moors by beacon fires flashed important news for hundreds of miles.

Soon the Teacher Birds take up the alarm and on all sides I am announced in energetic tones, the shrill notes ringing through the forest aisles in crescendo strains, emphatically declaring me the particular exponent of education whose coming they have so long heralded.

In the trail are countless tiny toads so varied in coloring as to attract my attention. Where the earth is dark and mucky their backs are black; but where it is leaf strewn they are rusty brown, conforming almost perfectly to the coloring of their surroundings, a very interesting illustration of Nature's scheme of protecting even her humblest creatures.

A familiar chorus of squeaks breaks upon the ear and, halting to locate the source, I catch sight of a Hairy Woodpecker as he goes galloping by with his bill full of grubs, hurrying to a dead birch. His approach is signaled by a loud "*perk, perk.*" The response is a jargon of hungry cries from his well-hidden brood, and as he lights just beneath the hole several black and white heads with open beaks appear, eagerly reaching for their breakfasts. He tarries only long enough to feed the youngsters, then with a farewell cry goes winging away for more food. These Woodpeckers seem most devoted and industrious parents.

In the soft trail deep tracks are seen, sharp-pointed and clean-cut, easily recognized as those of a deer, a buck, evidently made since the rain of early morning, and headed in the direction I am traveling. Their freshness indicates that he may be close by, and, advancing with great caution, in a few minutes I am brought to a sudden halt by the crashing of underbrush just ahead and to the right of the trail, as a large buck in his handsome coat of summer red goes bounding away in uncertain flight. But he has not located the source of danger, and as I slip

behind the bole of a beech he stops, scans the trail ahead for some distance, then evidently thinking his alarm unwarranted, turns about and works slowly back quietly browsing on the succulent stems of ash and moosewood.

As he is not more than fifty yards distant I can see him distinctly, his wariness evident in every movement. Quickly cropping a mouthful of leaves, he raises his head and cautiously scans the forest, his ears constantly turning to catch the slightest sound. It is evident that a life amid constant peril has taught him unceasing vigilance. He is a large specimen with half-grown antlers in full velvet, rising straight above the shapely head like blunt sticks, giving little promise of the fine, wide-spreading, well polished weapons with which he will go forth to battle in the early fall. After watching him intently for some time, a careless movement on my part catches his quick eye, up goes the white flag and away he bounds, clearing a spruce top and several fallen trees with an ease that would be quite the envy of a professional hurdler. That he saw rather than scented me is evident from his failure to blow.

As the trail crosses the height of land, large tracks, much like those of a cow, are seen, but larger and more pointed, and it is evident that a moose has recently passed this way.

In a sharp angle of the pathway an Ovenbird springs up almost at my feet and flutters silently away after the manner of a nesting bird. A brief search reveals a nest so cleverly constructed that, but for the presence of the owner,

one would be unlikely to find it. Under the drooping branches of a tiny spruce is a globular mound of dead leaves, with an opening in the side to a cup-like receptacle nicely built of bits of bark and rootlets, in which are five white eggs thickly speckled with brown. The loose construction of the exterior and the character of the material serve well in its concealment, for to the casual observer it has all the appearance of a bunch of leaves tossed together by the wind. Rarely have I seen a more attractive home. Both location and architecture appeal to me as being particularly fitting for a ground dweller of the dense forest; and I withdraw with a resolve to secure this leaf-built bower as a souvenir of the woods, after it has served its purpose.

From this point the trail descends and spruce and cedar appear again. From the thick tops comes the fine, shrill "*weé-see, weé-see, weé-see*" of the Blackburnian Warbler, the brilliant beauty of his plumage emphasized against the background of sombre green. With the feeling that I can well afford to delay my fishing for a visit with this beautiful little creature, I halt for some time to admire his exquisite coloring and his rather musical song. To add to my keen delight there comes from a thicket near at hand the inimitable song of the Winter Wren. Quite enraptured with the rare beauty of one and the splendid vocal performance of the other, I stand for some time, finally taking up the trail again with a deep sense of gratitude for Nature's lavish bounties.

Where a small rock-strewn brook crosses the trail a stop is made for a drink of the pure, cold water and my eye is attracted by a peculiar track in the wet earth for all the world like that of a barefoot boy of ten. For a moment, forgetful of my surroundings, I picture a lad with dinner pail and well-thumbed books trudging along to school, and in imagination I hear the busy murmur of the classroom; then suddenly the realization comes to me that this is the wilderness, and the tracks before me are not those of a boy at all, but of a good-sized bear, very fresh and headed in the direction I am going. With senses fully alert the advance is cautiously made in the hope of catching a sight of him while searching for his morning meal, unless, perchance, he has already scented me, and silently vanished in the undergrowth.

The bear is the shyest of all the wild folk, and silent as a shadow must be he who approaches one without giving warning of his presence. Some distance along the trail I find signs of his work, a rotten log torn in pieces for the grubs hidden in the sodden mass; and a little farther, an old stump shattered and broken in his search for ants, the work displaying unmistakable evidence of his great strength. Close by, the tracks suddenly leave the trail and lead into a dense thicket, it being apparent from the increased distance between them that he was in a hurry, probably alarmed at my approach.

Well knowing the futility of following him, the journey is continued and soon through the trees I catch a glimpse of the lake, its blue sur-

face, ruffled by the gentle west wind, sparkling in the brilliant sunshine. On the farther shore a doe is leisurely wading along, now plucking the tender water grasses, now raising her slender neck for a bit of the cedar boughs to spice her meal. By the little cabin of rough logs built many years ago by a hunter, I find another visitor trying to gain entrance and judging from the size of the hole he had already gnawed, he would soon have succeeded but for the interruption. Unwilling to entertain a hedgehog at lunch, I seek a stout stick and drive him some distance away, leaving him only after administering a good drubbing on his quill-protected back.

As I appear at the boat landing the deer gazes at me for an instant and vanishes; the cedar branches closing behind give no sign of her presence. Quickly paddling to the farther shore I am soon engaged in my favorite sport, and the response of the red-finned, red-spotted inhabitants of the lake is both prompt and earnest. A Blue Jay passes inshore, his strange silence indicating the domestic nature of his errand. A "Lone Fisherman" rattles by, and perching on a dead limb well out over the water declares his purpose of catching a trout, although he has no gaudy flies to tempt them. Soon he plunges, emerges with a wriggling fish and disappears around the point where, no doubt, he has a family to provide for.

Loon. Presently a dark cloud overspreads the sky, the wind freshens, and from the middle of the lake comes the lonesome cry of a Loon.

"PADDLING TO THE FARTHER SHORE"

Gradually he works toward me into shallow water and soon is diving for fish, for he, too, is a lover of these delicately-flavored trout. Between his divings, raising himself well out of water, he announces his success in weird laughter with a great flourish of his long wings. Then he, too, disappears around the bend, for his nest is in the Pocket, the little bag-shaped bay at the southwest end of the lake. So close to the water that the nesting bird can slip into it without the necessity of walking at all, is a loose pile of sticks and rushes in which are deposited the two large lead-colored eggs.

This bird is very well adapted to a life on the water, but is ill suited for land dwelling, as its legs are so far back (at the end of the body in fact), that when trying to walk it overbalances in a very awkward manner. But on the water it is a veritable master; for not only can it stay under for what seems an incredible length of time for an air-breathing creature, but so great are its natatorial powers that the distance traversed during one of its submarine excursions is little short of marvelous. No less striking is the celerity which it displays in getting under. It is a well-known fact among hunters that in the old days of muzzle-loading guns the chances of killing a Loon, unless he could be taken unawares, were very small. So keen of eye was he, and so quick of movement, that in the instant between the flash of the cap and the arrival of the bullet the bird was able to get safely below the surface, and the bullet harmlessly hit the water where he had been sitting.

But with the coming of the high-power, breech-loading guns, even the wonderful quickness of this noble bird cannot save him from the ruthless hunter. And, in consequence, he is becoming comparatively rare although formerly his piercing voice raised the echoes on nearly every woodland lake of the north country.

There is much about the Great Northern Diver that smacks of the wilderness. His shy nesting habits, his splendid powers of swimming and flight, and, above all, his weird, unearthly cry, make him the most interesting inhabitant of woodland waters. His cry sometimes so closely resembles the shrieking of a person in sore distress as to easily deceive one. I well remember when a boy one spring day I had strayed along the bank of the Androscoggin without the knowledge of my parents, when a Loon paddling about in the river raised his awful cry, and at once the folks came rushing out to rescue me from drowning.

If when camped on some woodland lake there comes to your ears this wild, lonesome, quavering cry its effect is hair-raising. Some years ago we were occupying the little log cabin here on Horseshoe Lake. In the middle of a September night we were awakened by a fearful tempest of lightning, rain and wind that laid low many an old monarch of the forest. In the midst of this warring of the elements, right off the camp two Loons raised their weirdest, most awful cries. Never in my many years of experience in the woods have I heard sounds more alarming, more awesome and fear-inspiring, although

we well knew their source. The proverbial laughter of demons could scarcely have been more fearsome. It is said these cries are not unlike the howling of wolves.

One year while at Big Lyford Pond, the headwaters of Pleasant River, we found a Loon's nest by the shore. At dusk we made an effort to stalk the sitting bird in our canoe, but while yet fifty feet away she slid into the water, the gleam of her white breast in the shallows being the only indication we had of her presence, until she arose a hundred yards from shore. Far into the night the pair broke the stillness with their cries of protest at being disturbed.

The Loon is a fish-eating bird that seizes its prey under the water with its strong, sharply pointed bill. Stories are told of fishermen catching Loons in water eighty or more feet deep, good evidence of their power as swimmers. They range in summer from northern New England to the Arctic Circle, wintering usually about the salt water, from southern New England to the Gulf.

Midday brings me to camp, where a lunch of broiled trout is greatly enjoyed, and in the hour of leisure that follows, several of my feathered friends call. A Robin comes hurtling out of the thicket by the spring, watches me for a time, then disappears, seemingly quite out of place in this remote locality. The harsh cackles of the Rusty Blackbird are heard as a squad appears, vigorously punishing a solitary Crow which evidently ventured too near their nests. This is the only corn puller I have seen since com-

ing into the woods. It may be that their absence is due to the fact that here is no corn to pull.

High over a distant hill a pair of Broad-winged Hawks wheel in great circles above their forest home. Across the lake in arrow-like flight comes a Sheldrake, settling in the shallows for a meal of small trout. At the rear of the cabin a Preacher Bird voices his arguments, the discourse often punctuated by marks of interrogation, and exclamation as well. The slowly westering sun gives its warning of declining day; back to the lake I go and in reasonable time the creel is filled with choice fish of satisfactory size.

On the return I again inspect the Oven Bird's home, and this time she does not fly until my hand almost closes the opening to her leafy bower. A little farther along the trail such a jargon of shrill Jay cries suddenly bursts from the treetops just ahead of me as to instantly bring me to a halt, wondering upon what mischief these freebooters in blue are now bent. The uncertainty is short lived, for above their shrieks rises a hoarse cry, startling and raucous, "*whoo-o-ah, whoo-o-ah-h,*" so discordant and altogether strange that for an instant I am quite at a loss to account for it.

A little investigation with the field glass, however, reveals its source, a large Barred Owl, beset and sadly harassed by a band of Blue Jays. Perched in the topmost limbs of a tall birch, he strikes savagely with beak and claw at his daring tormentors as they dart at him, hurling at them his defiance in full voiced cry. Thoroughly aroused and desperate he defends

himself, and for a time seems quite able to hold his own.

But after a few moments of strenuous resistance he seems discouraged at their numbers and takes wing, clumsily making his way among the treetops, half blinded in the strong light. His retreat is the signal for redoubled efforts on the part of the Jays, and they fairly swarm about him in his flight, soon forcing him to perch again. Here the attack is continued, and again he seeks safety in flight. As I proceed far down the trail I hear his fierce battlecry; but I suspect that with the coming of darkness when his full powers of vision return there will be quick scattering among his noisy tormentors.

In the lowlands the Thrushes are voicing their evening hymns and about First Pond the White-throats are singing their farewells to the day. The cabin is reached with a deep sense of satisfaction in the events of the day.

During a month's stay in the forest sixty-eight varieties of birds were fully identified. Glimpses of several other Warblers were had, but so fleeting that it was not possible to positively name them. No doubt there are eighty or more varieties there, a wonderful chorus you may be sure, heard by few besides the wild folk themselves. Yet were the birds the only attraction of the wilderness, it is sufficient to make delightful a long visit to its sheltering depths.

Chapter XVI

IN THE ORCHARD

"I once knew all the birds that came
And nested in our orchard trees,
For every flower I had a name —
My friends were woodchucks, toads, and bees;
I knew where thrived in yonder glen
What plants would soothe a stone-bruised toe —
Oh I was very learned then,
But that was very long ago."

— Eugene Field.

To many of our feathered friends there are few places more attractive than an orchard, if its location be somewhat secluded, and the tree-tops thick enough to afford good shelter. During the spring migration the weary travelers halt here for food and rest; as the nesting season approaches many seek its friendly shade as a suitable situation in which to rear their young; in autumn, with the coming of the time for the southward march again, it is a favorite rallying place for the families of the neighborhood while making ready for the journey.

Here, too, during the late summer and early fall may be seen many strangers that nested in the Far North, in distant Labrador, or on the shores of Hudson Bay, leisurely working their way back to winter homes in sunnier climes. At this time there is little evidence of the haste which marked their northward passage, for the

labors of the season are over, and the young, now full grown, are cheerful fellow-travelers, even outnumbering the parent birds. These wise little bodies foretell the coming of the bleak winter with wonderful certainty, for long before the first visit of Jack Frost, even while the sway of summer is yet undisputed, they leave their nesting grounds to take up the first stages of the southward journey.

But even when the last summer visitor has departed and the chill blasts of winter are again sweeping the desolate landscape, the orchard still has its feathered folk; for several hardy pilgrims of the snow here find favorable feeding grounds, and many other winter wanderers make occasional calls.

Our little valley in Maine is bordered to the west by a long low hill, standing modestly back from the road and river, facing eastward. Along its southern slope and reaching well up over the brow is such an orchard, with trees gnarled and twisted by the storms of many winters, yet vigorous and fruitful despite their advanced age and many deformities.

The wide-spreading trees join their branches in friendly clasp, forming in summer a roof of green so dense that only here and there the sunlight strikes through. As a result, the moist soil beneath is scantily clothed with fine grass and earthworms abound, much to the happiness of many birds. The orchard is enclosed on all sides by a high moss-grown stone wall, broken and irregular, upon which have been piled for many years the superfluous branches pruned

from the thick treetops, excellent cover for the more timid folks.

A few rods back of the orchard is a dense growth of pine and hemlock, birch and maple which reaches down the western slope of the hill into a narrow glen where a tiny brook tinkles and gurgles over its rocky bed. In front of this orchard rich pasture lands slope down to the farmhouses of the valley. That to the south is studded by a grove of sugar maples whose sturdy lichen-covered boles yield every spring a generous flow of their lifeblood in response to the invitation of the farmer, bountifully supplying him with one of Nature's choicest sweets.

These surroundings and the comparative seclusion of the orchard make it the favorite haunt of birds at all seasons of the year, and rarely does a person enter its borders without finding some one of them plying his trade in his own peculiar way.

In the late autumn days, as twilight falls, Grouse slip out of the neighboring thickets to feast upon the tender buds all carefully sealed for winter. They are not, I fear, very welcome visitors, for the fact is they do much damage by nipping off the blossom buds which enclose the promise of next year's crop.

So it frequently happens that the farmer is seen in the dusk of a December day with gun firmly clasped in toilworn hands making his way stealthily about, or sitting quietly on some moss-clad boulder, grimly bent upon the destruction of this feathered menace. Much as I appreciate the justice of the farmer's cause, my

"RICH PASTURE LANDS SLOPE DOWN TO THE FARMHOUSES OF THE VALLEY"

sympathies are always enlisted on the side of the culprit. For is it not quite necessary that he be well fed at this season that he may be prepared to withstand the rigors of the fast approaching winter? To be sure he could feed upon the buds of maple and birch in the nearby wood, but these lack the delicate flavor of apple buds, and with birds, as men, variety adds spice to existence. And it may be that the element of adventure is not wholly unattractive to these hardy citizens.

Every day Downy Woodpeckers beat lively tattoos here, and the tree trunks bear many autographs of these very useful birds, worked in the rough bark with great regularity. Not only do they find various insects concealed in the outer covering, but drilling this they seek the delicate inner layer, the soft and juicy cambium, which is a favorite food. Orchard owners are inclined to the belief that the numerous punctures injure the trees; but such is not the case unless the rows of holes, girdling the tree, shut off the flow of sap, a condition which rarely occurs. The Downies live close by, and the journey, being short, is often made.

In the warm spring days the orchard is the scene of much love making. In early April the male Downy, he of the red nape, "turns his thoughts to love," and not having the gift of song with which to woo a mate attempts to drum her up. For this purpose he seeks a dead, dry limb that will resound tunefully to the application of his drumstick, and his rolling tattoo is often heard.

The female, with becoming modesty, flits about the edge of the wood, plainly hearing the love call, yet shyly remaining in the background for a time, lest it appear that her affections are too easily won. Perhaps, too, she remembers how in previous years, at the approach of cold weather, her faithless mate deserted her, making for himself a new retreat where he passed the winter in selfish solitude.

But finally the increasing ardor of the lover overcomes her reluctance, she coyly approaches, a formal compact is made, and a pair of happy hearts seeks a suitable tree where a snug home for the brood is excavated.

The Downy's larger cousin, the Hairy, he of the bold call and louder taps, occasionally registers here; but his autographs take the form of good-sized holes cut in decaying branches or trunk to reach the concealed wood borer. His love making, similar in kind, takes place in the seclusion of the woods, for he is rather a shy bird, not so often seen in the open.

One spring day as I entered the orchard I caught a flash of red and gold from the farther side, and there came to my ears gentle love notes, soft as the cooing of a dove. On a low limb I saw two male Flickers paying court to the lady of their choice. How they did bow and courtesy, spreading their beautiful tails like fans, the yellow quills shining like ribs of gold, as they bubbled and gurgled with the ecstasy of their wooing!

Meantime the courted lady, apparently unmoved, sat bolt upright between the two, with

something of a disdainful poise of her handsome head, as it seemed to me, but giving no visible sign of encouragement to the ardent advances of either. For some time the little drama went on, then she took wing in bounding flight, closely followed by her persistent admirers.

It would be very interesting to know if she finally accepted one of these suitors, and upon what her choice was based. Was her coyness a part of the etiquette of Flicker courtship? Who can tell the sequel to this idyl of the spring? That one of the lovers was successful I feel very sure, for a pair of Flickers nested in a dead maple in the grove, in a hole some forty feet from the ground. How aptly are they named Highholes!

During all the colder months Chickadees are daily visitors. They carefully inspect every cranny and crevice of trunk and limb for the eggs of various insects, fearlessly clinging to the very tips of the wind-tossed branches, and merrily calling to one another as they busily search. In the warm days of April are heard their "sweetheart" notes, inexpressibly tender, and a variety of dainty calls which are always sprightly messages of good cheer. But at all seasons one does not listen long without hearing their identity declared over and over again, "*chick-a-dee-dee, chick-a-dee-dee-dee,*" a cheery and mirthful declaration. Few birds appear happier under the trying conditions of our rapid changes of climate and no visitor to the orchard gives evidence of a lighter heart. There is not a more useful bird to the farmer than this

sprite in black and gray, a fact which I fear he does not fully appreciate. These midgets actually destroy every year countless numbers of harmful insects, making possible in a great degree the success of the apple crop.

Last year the trees were loaded. Northern Spy and Ben Davis, Baldwin and Bellflower bent beneath the weight of luscious fruit which clustered amid the dark foliage, with cheeks deep-flushed by the autumn sun. A hard frost in mid-October rendered worthless many barrels of the juicy apples which were left upon the trees, where they hung all winter, hard as rocks in the freezing weather. But, thawed by the spring sun and April rain they fell to earth, and Robin and Red-wing, hungry from their long flight, feasted sumptuously on the soft brown pulp.

When I first saw large flocks of these birds here in early April I thought they were picking out the seeds, but close inspection convinced me that they were eating the pulp, leaving the seeds untouched. This fact greatly interested a red squirrel who lives here, for their generosity saved him much labor. All he had to do to secure his rations was to follow a squad of these rollicking rovers, picking up the seeds which they rejected. He seemed to fully appreciate the opportunity, for I often found him on duty, a sort of camp-follower to the flock.

He has a sweet tooth also. One day I saw him in a sugar maple clinging to the under side of a limb, daintily sipping the sap which trickled from a crack in the tender bark caused by last

winter's hard freezing. So absorbed was he in the enjoyment of this delicacy that he paid no attention to me, although I stood for a long time within a few feet of him.

How Robin and Red-wing frolic and flourish here in the bright spring weather! All through April they live in bands, and, to all appearances, get on admirably together, for I see them in the treetops whistling and singing, cackling and caroling in great glee. Then down upon the ground they drop, feeding side by side in perfect amity, Red-wing's glossy coat with its brilliant trimmings making a fine contrast to Robin's duller-hued garments. But unless my eyes deceive me, toward the end of the month his breast takes on a deeper flush, probably his wedding colors, for the mating season is near at hand. After that happy event is over, he gives up his careless, roaming life and settles down to more serious business, nest building and caring for the mate and little ones.

There lives in the orchard a gray old woodchuck, a permanent resident for many years. To be sure, he is not in evidence during the winter, for he sleeps away the dreary months, cosily tucked in his warm nest in a deep hole under the wall. But the awakening season stirs his sluggish blood, too, and by the latter part of March he ventures forth, still drowsy and quite unkempt after his long nap, to renew his acquaintance with the outside world.

One day I sighted him, alarmed at my approach, scurrying along in great haste, to a safe station at the mouth of his den. Halting there

he warily watched me for a time, then with an explosive whistle that startled every feathered creature within hearing into sudden flight, he sought his dark retreat, chattering and grumbling his protest at being disturbed in his own domain. He seems to be a sort of watchman whose duty it is to keep ward over the inhabitants of the orchard. At any rate, all recognize his signal, for they beat a hasty retreat whenever his alarm is heard.

A large band of Juncos tarries here during the month of April on their journey north, convoying straggling squads of Sparrows, Vesper, Song, Tree and Savanna. They spend much time on the ground, gleaning seeds from last year's grasses and weeds. They pay little heed to my approach until I am close upon them, when up they spring, the whole flock as a single bird, with a tense sound like the flapping of a sail, their white-bordered tails flashing the alarm to any stragglers that have not perceived the intruder.

Then in the low trees they sit for a time, very smart in their suits of dark slate and white. Their alarm soon passing, the whole band sets up a chorus of trills and calls which may not be classed as true melody, yet are very pleasant sounds; and, coming from such contented little bodies, they strangely appeal to one's sense of the fitness of things. At least four different utterances have I noted, one a song of much merit, although simple in the variety of its notes.

At the alarm the Song Sparrows pump their way to cover in the old brush rick along the walls, where for a brief interval they hide; but

their restlessness quickly sends them out again and, as confidence is restored, from the topmost stones they vigorously proclaim their faith that all is well. Then back to their feeding they go, as though nothing unusual had happened.

The Vespers are usually silent, except at morning and evening, but the Savannas from the low branches join in with their grasshopper-like trills, so faint as to be audible but a short distance away.

Occasionally in April Fox Sparrows are seen, their bright brown coats very conspicuous among the rather dull shades of the band. But they appear shy and restless, evidently feeling out of place in such open location, and soon take wing in a steady thrush-like flight for the denser cover of the woods.

In early May male Purple Finches come, and all day deftly shell the apple seeds for the dainty morsel within. At times they also pick off the swelling buds, but this fact is, I hope, unknown to the farmer; for did he know, he might feel called upon to interfere with these brilliant members of the spring choir.

So beautiful is the red of their coats that one easily imagines they have been dipped in the juice of wild strawberries. And what a striking contrast to their modestly dressed mates who arrive a little later! It is not an easy matter to distinguish the females from the numerous Sparrows about, but their short, rounded bills and forked tails will lead to their identity.

During the spring days Hermit Thrushes steal out of the woods for a stroll in the orchard,

but here they are shy and silent, not even greeting me with a call note. The deep gloom of the evergreens alone seems to inspire them to their supreme effort! I see them feeding on the remains of the apples left by the earlier foragers, and last year's berries of the sumachs which grow along the wall.

Phœbe comes early and for a few days is very busy with flycatching, evidently being extremely hungry after his long flight. For several days his gentle notes are much in evidence, but with the arrival of his mate the devoted pair seek a favorable nesting place in a barn cellar, or under one of the bridges spanning the Nezinscot.

Several Warblers make brief calls as they pass along; Yellow Palm and Myrtle, Black and White, and Blackpoll, Nashville and Yellow-throat halt here to rest and feed. I have not found the nests of any members of this celebrated family here, but as individuals of several varieties appear at times all summer, I judge they must be nesting in the near-by thickets.

Chipping Sparrows take possession in late April and for several months are the most numerous birds. The task of collecting hair for the nest linings must be a very easy one in the neighboring pasture lands. Now and then I see them fly catching, although, like all the members of the family, they are known as seed eaters. Sebec comes soon after, and his metallic notes are pretty constant sounds all summer. Bluebirds find a satisfactory home in hollow branch or trunk and the mellow warble of this constant lover makes a pleasing sound during all the

springtime. No sooner are the youngsters of the first brood flying about in their speckled suits, than the mother, leaving to the father the task of solving the food problem for the family, goes back to rear a second brood, and late in July the two families unite in a happy band of rovers.

Of all the Robins that gather here in early spring, usually but a single pair remains, building their rude nest in the fork of a tree, often not more than five or six feet above the ground. A prowling cat or weasel would have a fine feast on a nestful of the tender fledglings, but in spite of the exposed position of the nest the brood is usually reared in safety, and by mid-June they are flying freely about in their short-tailed suits of spotted brown. Soon five more blue eggs are laid and a few weeks later the second family joins the first, the industrious parents appearing very proud of their sturdy flock.

These highly prized friends of man show so little sagacity in concealing their nests, the wonder is that the young are not all destroyed. But a kind Providence seems to protect them, for among all the Robins' nests I find during a season, probably a dozen or more, not often do I discover a tragedy. Yet among the nests of the other varieties which I observe, the destruction from one cause or another is sometimes very great.

By the first of May all the Redwings abandon the orchard, taking themselves to the lowlands where in the bushes about the brook mouth and cove, they settle down for the summer. Last year many nests built in the low bushes came

to grief from a quick rise of water in early June. But these were at once deserted and others built in safer locations so that a goodly number of young were reared.

In early May the Sparrows also scatter for nesting grounds in the neighboring fields and pastures. Two or three pairs of Song Sparrows and a pair of Vespers remain in the orchard, finding secure home sites in the tall grass. Orioles and Kingbirds come by mid-May, and a pair of each usually remains for the summer. The Kingbirds, in searching for nest-building material, come to our lawn where we hang out strings of many sizes and colors. For several days we see them pulling and tugging at the coveted twine, then flying away with it over the hill to the orchard.

Later, when the nest is found, we marvel much at the strings festooned about the branches, several feet from the nest. Is this to suggest dangerous nets and snares to all creatures that happen near? And is it the same instinct which prompts his cousin, the Great Crested Flycatcher, to hang outside his home the ominous snakeskin? Last year I visited the nest several times, and was much surprised at the lack of noisy demonstration usually made by these birds when one approaches their home. In truth, it almost seemed that they knew I was a friend who would do them no harm, for they sat demurely by while I admired the fledglings.

By the first of August in the orchard appears the vanguard of the northern army already taking up the return march, and soon comes

trooping back by easy stages the main body of the early migrants, Humming Birds and Swallows, Warblers and Flycatchers. The more delicate members of the feathered army are slowly followed by the hardier varieties, many of which linger about through the golden days of autumn, even until bleak November is again upon us.

During the warm, smoky days of Indian summer the migration seems to halt for a time, as though the birds, too, are quite deceived into believing that the balmy air really presages the return of the season of joy and song. But the cold storm, which is pretty sure to follow these halcyon days, starts them southward again in a hurry, and only the permanent residents are left to cheer us. Soon the Woodchuck seeks his winter quarters, the Red Squirrel hunts closer cover in the shelter of the pines, and through the bare limbs of the old trees sifts the driving snow. The walls are buried in rapidly growing drifts and the world of green becomes a world of white.

As the years go by, each season brings to the orchard its feathered visitors with their songs of gladness, some tarrying for a long stay, some hurrying on to more attractive scenes. If one were but to observe the birds that call here during the year, the list would be a long one and many interesting stories could be told. Withal it is a delightful spot, where both bird and man find much to make the heart glad.

Chapter XVII

BIRD ODDITIES

"I repeat them as I heard them."
—*Hiawatha*, Longfellow.

One of our neighbors in the country, a lady who was a great lover of birds, early one autumn caught a pair of Juncos in the woodhouse and placed them in a cage just made vacant by the death of a Canary. Their handsome coats, clean white bills, well groomed appearance, sprightly call notes and genial ways, made them very attractive pets. For some time they seemed quite as happy in their new home as when roaming about the country with their mates. But after a few weeks, one of them lost something of its cheerfulness, began to droop and showed such unmistakable signs of illness that the lady, fearing it would die, released it.

The other seemed happy and contented until the fall migration began, when from the perch by the window it could see its fellows playing in the lilac bushes in the yard. This sight, or the sound of their merry calls, appeared to arouse a desire for liberty again, for it, too, became restless and discontented, fluttering and beating its wings against the wires of the cage, seemingly possessed of a deep longing for their companionship. So clearly did it express its desire for free-

Courtesy of the National Association of Audubon Societies

JUNCO

dom that the tender-hearted lady took the cage to an open window in the chamber and released it, little expecting to see her pet again.

The Junco at once joined a flock in the yard, and to all appearances was very happy in the society of its own kind. The cage, with the door ajar, was left by the open window and when the shades of evening began to fall, the signal for bedtime in bird-land, the little fellow, leaving the flock, flew to the open window, entered the cage and went to sleep on its accustomed perch. This was repeated every night until the season was well advanced, when it finally joined a company of Juncos on their way south.

The next spring when the northern migration again brought a flock of these birds to her yard, the lady placed the cage by the open window with the faint hope that if her old friend chanced that way it would at least make a brief call. That very night a Junco came and slept in the cage and continued to return every night as long as flocks of Juncos were about; but with the approach of the mating season, when all the family started for the northern nesting grounds, it disappeared and did not return again.

The query naturally arises, was this the same bird that occupied the cage the previous fall or a stranger that chanced along? While it is difficult to positively identify individual birds, yet it seems there can be little doubt in this case; for if it was not the same bird why did it leave the flock to seek so unusual a resting place?

The whole question of the return of birds to familiar localities is a highly interesting one, and

we are anxious to believe that the same friends return to us every spring, for we love to hail them as old acquaintances. It seems highly probable that the majority of birds do return to familiar localities; in fact, it has been definitely proven in several instances that an individual has returned to a familiar haunt year after year, even occupying the same nest. I have seen a Robin on arriving in the spring, go at once to the old nest under our porch, and after mating, begin housekeeping either in the old nest, or a new one built close beside it. This bird, a male, had every appearance of being perfectly familiar with the surroundings. It seems clear that frequently one of a pair, usually the male, will lead his new mate to the old nesting place where for several seasons, perhaps, the brood has been reared in security.

In my boyhood, the way to school was along a road bordered for some distance on one side by an old stump fence which for many years had successfully withstood the ravages of the elements. A hollow stump root, occupied year after year, as the nesting place of a pair of Bluebirds, attracted much attention from the passing children. I recently learned that the root still shelters each year a Bluebird family, and upon further inquiry, a man some seventy years of age informed me that in *his* boyhood, too, it was the home of these heralds of the spring. For more than sixty years the old stump has been the abiding place of Bluebirds and it would be very interesting to know if the occupants today are descendants of the original householders.

Birds of a given variety are so much alike that it is not easy to distinguish individuals, except between male and female, yet by careful study one may find traits which will lead to the positive identification of a particular bird. They seem never to grow old, at least there is little visible change in their appearance from year to year. The plumage is glossy and well groomed when they arrive in the springtime, as though they were a year younger, rather than a year older, and their sprightly manners and songs of good cheer give no sign of advancing age. No doubt many die during the long journeys, and alas! many are killed by hunters in the South, where laws are not generally observed. But their places about our homes are filled by others so closely resembling the old friends that we are not able to detect the difference, except by the most painstaking observations, and our enjoyment of their presence goes on as we have no knowledge of the change.

Bird Company

"And the birds sang round him, o'er him."
—*Hiawatha*, Longfellow.

My friend, the Old Guide, is an ardent bird lover. During all the years he has lived in the woods he has ever been alert in the study of their ways, and has gained close acquaintance with them. Not only has he been a careful and intelligent observer, but he possesses in an unusual degree that natural fondness for, and sympathy with, the wild folk, both birds and

animals, which are necessary to a keen insight into their habits. Being much alone in the wilderness from the nature of his calling, he turned to the study of these creatures for amusement, and he has had many interesting experiences. As you cannot have the pleasure of hearing these stories from his lips, I will attempt to record a few here.

It often happened that with the approach of the season of deep snows his occupation as guide ceased, and he sought employment as cook for a crew of lumbermen. During the long winters he had many quite unusual experiences with the birds and one in particular he relates, which afforded him much amusement and real pleasure as well. Far in the woods, cut off from civilization, the only means of communication with the outside world being the tote team which made occasional trips to the settlement for supplies, he turned to the feathered and the furred folk about him for entertainment.

The winter days being very short, the men left camp for their labor in the morning, before the first glint of daylight, returning when the shades were beginning to fall, for in the gloom of the spruce forest the night comes quickly. During the hours of daylight he was left alone with a boy, his assistant in the work of preparing food for the crew. A part of the boy's duty was to carry the midday lunch to the men who were cutting the timber too far from the camp to warrant their return at noon. By eleven o'clock each day the boy would set out with buckets of food and great pots of steaming

coffee on a strong, roughly built sled drawn by a sedate old horse, as the lumber roads are far from smooth and adapted only to a very slow pace, if one is to travel safely. Thus left alone for several hours each day my friend turned to the birds for amusement.

When, in late November, the first real stress of winter came with the deeper snows, a flock of Red Crossbills took up their temporary abode in the evergreen trees near the camp. For these he sprinkled bits of food on the snow, at first withdrawing at once that his presence might not keep them from the feast. But very quickly they learned of his benevolence, and his appearance was the signal for them to drop down from the treetops and gather about him. The small flock of Crossbills grew into a large one as the winter advanced, and they were joined by a great number of "Chit-a-wits," as he calls them, a bird which I believe to be either the Tree Sparrow or Redpoll.

Learning their great fondness for salt, he sprinkled their food generously with it, and threw out for them the brine from the pork barrels, the salt of which they eagerly devoured. In a few weeks a colony of more than a hundred came to depend upon him for their daily food supply. So tame did they become under this gentle treatment, that his signal whistle was instantly followed by the whir of many wings as down they came, lighting on his shoulder, hat and arms, even peeking into the pockets of his coat, where were stowed away a few choice bits of cake well seasoned with salt. In a short time

he could take them in his hands, stroking and petting them as one does a tame Canary.

But they would permit the presence of no one else. In telling the lumbermen of his pets a desire was expressed to see the unusual sight and arrangements were made for feeding the birds at dusk as the men came from work. So the next day he postponed the feeding until a halloo from the forest signaled the approach of the men. As usual his whistle brought the birds about, and in a moment he was covered with them, eagerly clamoring for their delayed supper. When they were well settled at their meal, at his low whistle, the men quietly appeared around the corner of the camp, when instantly with a cry of alarm, the entire flock, Crossbills and "Chit-a-wits," took wing for the hemlocks and could not be induced to return while the men were in sight. But as soon as the men withdrew, back came the birds and finished their meal without further interruption. Although the experiment was tried again and again during the winter, not once did the birds remain at their feeding after the men came into view.

All winter he had these pets about him, and much amusement and keen pleasure he derived from their friendliness and companionship. He left in the early spring at the close of the season's operation with a deep sense of regret and a feeling of loneliness at leaving his feathered friends. "And," said the old man, after relating the story, "I was never happier in my life than during that winter with those dear little creatures for my everyday companions." One can readily

believe that under such circumstances the daily presence of birds means much to a genuine Nature lover.

Jay Talk

He tells me that in the early days in the lumber camps the Canada Jay bore the name of "The Old Logger." The legend is that when an aged lumberman died his spirit at once took possession of a Jay, and if the bird was killed the spirit, too, died with it. This tale was told to all novices who appeared at the camps and as a result they were very careful to do no injury to these too friendly birds. Perhaps this lenient treatment accounts, in a manner at least, for their extreme boldness.

Regarding the great hardihood of these birds which enables them to rear their young when the terrible cold of winter still prevails, he relates the following story: The driver of the tote team left camp one bitter cold morning in early March to drive to the settlement, a long day's journey distant. Because of an accident on the road he was delayed for several hours and when night overtook him he cut a fir tree from the thick brush of which to make a shelter. As the tree fell a brood of half-grown Canada Jays was thrown out upon the frozen snow, crying piteously in their distress. But quickly the parent birds came and bore them away one by one to a neighboring spruce.

The eggs must have been laid and hatched in February when the temperature was many degrees below zero. Think of the vigor and

courage of birds that will hatch their young under such conditions! The food problem must have been a difficult one for them to solve, and had not the fledglings been constantly brooded by one of the parents, they would have perished from the cold.

A common pastime of the lumbermen, who well know the Jay's great fondness for meat, is to attach a bit to one end of a long string, the other end of which is fastened to a log of the camp near a window. The operator then places string and meat in a crevice between the logs and withdraws to await developments. No sooner is he in the cabin than the Jay, which all the time has been an interested spectator of these careful preparations, seizes the tempting morsel and starts with a rush toward some secluded perch where his feast is likely to be uninterrupted. Scarcely is he under way when with a jerk he is brought up with a suddenness that upsets him. Nothing daunted, however, he will return again and again until, in sheer pity for his keen hunger, the string is cut, and the meat is borne away in triumph.

Another diversion of the men is to balance a long dry spruce pole across the log which forms the doorsill of the camp, half of the pole being inside. To the outer end are fastened scraps of meat. When the Jay, and there is always one about, lights on the pole and seizes the bait, a man in the cabin hits the pole a mighty blow with an axe, and the poor bird is hurled many feet into the air. Yet he is uninjured by this rough treatment, and will return repeatedly

until he is at last allowed to devour the morsel in peace.

An incident which is also an excellent illustration of the fearless greed of the Canada Jay was related by another friend who is a persistent and skillful hunter of big game. While hunting moose in the Oxbow country one day, he sat down with his guide on an old log to lunch and rest. Almost immediately the Jays came, silent as ghosts, and perched just above their heads. When the food from the guide's pack was placed on the log the birds at once attempted to seize it and were kept from their purpose only by careful watching. Finally, to test their audacity, the hunter holding his rifle in his hands, impaled a doughnut on the end of the barrel. No sooner did a Jay observe the tempting morsel than he flew down and began to eagerly devour it, when the discharge of the rifle hurled him several feet into the air. But he was uninjured and soon returned to the feast, which this time he was allowed to finish. Truly the utter fearlessness of these birds is beyond man's understanding.

The Lost Fisherman

The Old Guide also told me of an amusing incident which happened when he was guiding at Camp Caribou on Parmacheenee Lake in northern Maine. An elderly fisherman from the city, Mr. Chickering by name, refusing the assistance of a guide, made his way about the woods alone, often spending the entire day on

some stream in pursuit of his favorite sport. One evening in June he failed to return to camp, but came in the next morning just as a party of guides was making ready to search for him. A night in the woods had improved neither the old man's appearance nor his temper. He complained bitterly of the insults hurled at him from the treetops by some ill bred birds through the long hours of the night, declaring that they mocked him in his distress, even repeating his name in derision. As he wandered about in his efforts to locate the trail to camp he had talked to himself in the anguish and fear under which he labored, for being lost in the great forest at night was to him a very serious matter. Then came the teasing of these heartless birds, in sheer mockery singing:

"Poor Mr. — Chickering, — Chickering, — Chickering;
A-l-l night — Chickering, — Chickering, — Chickering,"

repeated again and again, until his wrath against these feathered jesters was at high pitch. When told that this was the usual song of the White-throated Sparrow, his anger was somewhat appeased, but he never quite forgave these sweet singers who made light of his distress. You will remember that the song of this bird has been given several different interpretations, the particular version depending upon the choice of the interpreter.

Woodpecker Wooing

The male Woodpecker, not being endowed with musical talent, resorts to other means for

attracting and winning the affections of a mate. Being a skillful drummer, as we have already learned, he attempts to drum his way to the heart of the retiring female. Clinging to a dead dry stub, he beats a lively tattoo, perhaps thinking by this display of skill to prove his ability to bountifully supply his mate and the nestlings with fat grubs.

While fishing one spring on Kennebago Lake with a party of friends, we occupied a log cabin at some distance from the main camp. Close beside our cabin was a garden enclosed by a high fence of woven wire to protect the growing vegetables from the ravages of deer which were very abundant in that region. The taut wire was securely fastened to dry cedar posts set firmly in the ground. Every morning about daylight, a male Hairy Woodpecker came and hammered away on the resonant posts, the sound running around the enclosure as on a telephone line, seeming to increase rather than diminish as it traveled. We were regularly awakened by this early drummer, and for some time I was unable to determine the reason for his attacking the sound, dry posts which gave little prospect of containing a supply of grubs, or wood borers. After a time I saw a female flying shyly about in the edge of the woods and then the whole affair was plain to me. But alas! there came a tragedy to mar the success of this sylvan wooing. One morning in a frenzy of zeal he flew to the stove funnel which projected from the guide's camp in lieu of a chimney, and upon this he beat such a roll that every sleeping inmate was instantly

awakened. A well aimed shot from a rifle in the hands of an angry guide who strongly objected to being disturbed at such an unseemly hour put an end to the love making. Indeed "he loved not wisely but too well."

A Strange Occurrence

Two friends of mine set out one morning in late September from the Mt. Kineo House for a day's fishing on Moosehead Lake. As it was the open season for duck shooting, guns were taken along with the hope that some of these birds might be found in the sheltered coves about Lily Bay. While disposing of guns and tackle in the light boat preparatory to starting out, the leader attached to one of the lines fell overboard, a fact of which the fishermen were unaware until a hard jerk on the rod warned them that a trout had struck at the tempting flies. On raising the rod it was found that the leader had parted from the line, and together with the flies had been carried off by the fish. Speculation naturally followed as to the size and daring of the trout, but a new cast was quickly made up and attached to the line, and the sport began with little thought of the accident.

In the late afternoon as they rounded a point which protected a reed-bordered cove, a Wood Duck was seen at some distance, which at their appearance made frantic efforts to fly, but was unable to rise from the water, being held down, as it seemed, by some invisible weight. Approaching within gun shot, the duck was killed,

and on taking it into the boat it was found that an artificial trout fly attached to a leader had caught in the bird's foot, and upon pulling in the leader, which all the while seemed strangely endowed with life, judging from the circles it cut in the water, a two-pound trout was found securely fastened to a fly at the end. After a little careful examination of flies and leader it was identified as the very same cast which had been so quietly filched as they were starting in the morning. Much discussion followed this remarkable occurrence and the conclusion was reached that the trout had dragged the leader about the lake and coming near the surface had hooked the trailing fly into the duck's foot. And because of the size of the fish, the duck, when attempting to fly, had been unable to lift it. A photograph was taken of trout, duck and leader as they were taken from the water.

Chapter XVIII

BIRD PROTECTION

"Think of your woods and orchards without birds!

* * * * * * * *

Will bleat of flocks or bellowing of herds
Make up for the lost music, when your teams
Drag home the stingy harvest, and no more
The feathered gleaners follow to your door?

You call them thieves and pillagers; but know,
They are the winged wardens of your farms,
Who from the cornfields drive the insidious foe,
And from your harvests keep a hundred harms."

—*The Birds of Killingworth*, Longfellow.

In the last quarter of a century a great change of attitude toward birds has taken place among the citizens of our country. Slowly, to be sure, but, nevertheless, steadily interest in the preservation and increase of bird life has been aroused until today in city and country alike bird conservation is a very live topic. This is largely due to the fact that it has been demonstrated even to the satisfaction of the veriest doubter that the protection of birds has an important economic phase, entirely apart from the claim of the nature lover, whose sole argument might be the very good one of protecting the bird for its own sake as a creature of surpassing beauty, of notable vocal ability and highly interesting habits, which make strong appeal to the æsthetic side, if no other.

In recent years, because of the great war, the problem of increased food production and conservation has been so very important, the need for bird protection becomes imperative. The destruction of crops from the inroads of insect pests has become to the farmer and orchardist an annual menace. So serious in some sections of the country are these ravages that raising crops has been almost despaired of. The activities of the brown-tail moth in New England, the boll weevil in the cotton fields of the South, the cinch bug and Hessian fly in the wheat fields of the West, the potato bug throughout the North, to mention but a few of the most common, at times have reached such proportions as to constitute a serious problem for the farmer, to be met even in a partial degree only by expensive and laborious methods.

A striking instance of the value of birds in crop protection is found in the story of the Franklin gulls coming as by a miracle and saving the crops of the early Mormon settlers from destruction by black crickets. As myriads of crickets had stripped the country the season before, a repetition would have meant starvation for the hardy settlers on the very outskirts of civilization. Timely, indeed, was the coming of the gulls, for they completely destroyed the pest, insuring the harvest. The Mormons have commemorated the event by the erection of a beautiful monument in Salt Lake City, and ever since that eventful season Franklin gulls have been safe from harm among this grateful people.

If you have seen an orchard denuded by the

brown-tail or gypsy moth as though swept by fire, or a deciduous forest stripped clean of every vestige of green, transformed as it were to the nakedness of winter, you have some idea of the serious character of damage wrought by insects. The boll weevil of the cotton fields has caused such destruction that throughout whole sections rich lands have been abandoned or turned to some other crop. It has been estimated that the damage done to crops by insects throughout the United States in a single year reaches the enormous sum of $800,000,000. This is no idle estimate, but has been arrived at after painstaking research extending over a series of years, and most careful computation. Truly, a destruction of such magnitude deserves, even commands, the earnest attention of all thoughtful persons.

In this connection certain estimates made by ornithologists and other scientists of state and Federal departments of agriculture relative to the value of the service rendered by birds in meeting this evil are of prime interest. The keen appetites of young birds are well known, it being thought probable that the consumption of the bird's own weight in food per day is not an unusual occurrence. This very likely means in the case of the insect-eating birds that a single brood consumes from three hundred to one thousand insects in a single day. Chester K. Reed, the well known ornithologist, estimated that in Massachusetts alone birds destroy twenty-one thousand bushels of insects daily from May to September. In Nebraska a naturalist estimates that the daily consumption of insects at the

height of the season, the latter half of July and August, is one hundred and seventy carloads! While in New York State the estimated destruction of injurious insects by birds each season is more than three million bushels! Mr. William R. Oates, game commissioner of Michigan, has estimated the value of the service rendered by birds annually in that state in the destruction of noxious insects and weed seeds at more than $10,000,000. What a saving, and at what a trifling cost! Enormous as the figures are it should be remembered they are based upon well known facts. A very little logical reasoning readily leads to the conclusion that adequate protection of bird life is not only the natural but the least expensive means of preventing the vast annual damage to crops from causes largely preventable. In the light of these disclosures, is it not apparent that there are few problems of the farmer of greater moment? And, unlike many other difficulties in the farmer's path, the remedy to a great degree is at hand.

Besides these bird laborers never go on strike, never become intoxicated, never complain of the weather, take no days off either for sport or recreation. In the face of these facts can we do less than protect in every possible way such faithful friends of man? And all they ask in return is a reasonable supply of food, a secure nesting place, and protection from their numerous enemies. Careful students of natural phenomena have concluded that were all the birds destroyed, the earth in a comparatively short time would become uninhabitable for man.

Formerly country boys were quite accustomed to collect birds' eggs, entirely oblivious of the fact that taking the clutch meant the destruction of a whole brood of birds. Today, as a direct result of intelligent and sustained instruction in the schools and numerous nature clubs, as well as through the columns of the press, every boy and girl understands something of the value of the live bird, both as an object worthy of careful study for the beauty of its plumage, pleasing notes and songs and interesting habits, and for its practical value as a necessary aid to the farmer. In consequence they have become guardians of the birds, no mean allies in saving and recruiting this important army. While it probably may not be claimed that birds can meet in their entirety such difficult problems as the destruction of the boll weevil or brown-tail moth, yet it has been demonstrated by numerous experiments that they can do much to keep these pests in check.

Formerly, too, men and boys with guns ruthlessly destroyed many varieties other than game birds with very little heed to their rapidly diminishing numbers. I well remember when a boy in the country, shooting matches were organized for Thanksgiving Day. A table of counts having been arranged for the different varieties of birds and animals likely to be found in Maine at that season, competing parties sallied forth literally combing the country over large areas, killing every wild creature, in feathers or fur. The result was truly appalling. And after the collections were made and the count rendered all the smaller birds and animals were

given over to the cats—only game birds being regarded of value for food. Fortunately these destructive forays passed out of fashion long ago, and, in consequence, birds and small animals in that region, except perhaps in the case of game birds, are now much more numerous than formerly.

For many years the feather hunter wrought his merciless slaughter almost at will, and several of the most beautiful varieties came dangerously near to the point of extermination. The dainty white Egret of Florida was reduced almost to the vanishing point and even Sea Gulls, those familiar figures of harbor and shore, were greatly diminished in number under the murderous gun of this relentless destroyer. And all this because many ladies of the land held the mistaken notion that the feathers of a poor dead bird constitute a necessary and becoming adjunct to the milliner's art. Other varieties with attractive plumage suffered great reduction in numbers, and but for the timely intervention of kindly disposed lawmakers would have gone the way of the Wild Pigeon, Great Auk, and Labrador Duck.

Desultory attempts were made to correct this condition but after several years it became evident that the great variety of laws enacted in different states, and the entire absence of protective laws in a large group of states, made necessary some uniform system, if migratory birds in general were to be saved from extinction. Accordingly, in 1913 a Federal law was enacted forbidding the killing of insect-eating birds because of their value to agriculture, and of migra-

tory game birds. The execution of this law was placed in the hands of the Biological Survey, a bureau of the Department of Agriculture. The good effect of this prohibition has been manifested already in the increased numbers of our more common birds. The lives of many song birds,—Meadow Lark and Robin, Oriole and Thrush—have been made much safer by this wise and timely effort in their behalf. And now a treaty has been made between the United States and Canada looking to the adequate protection of all migratory birds. All good citizens, bird lovers in particular, may well rejoice at the outcome of the hard struggle so valiantly carried on for many years in behalf of these valuable friends of man. And to those enterprising men and women who have brought about this better day, gratitude and homage are due which may best be expressed in an earnest effort to obey all the laws looking to bird protection, and to compel such obedience from others.

A leading part in securing enactment of adequate laws for bird protection and their enforcement, and in stimulating public interest in the subject throughout the country, has been played by the National Association of Audubon Societies. This worthy organization has undoubtedly done more than any other agency—perhaps more than all other agencies combined—to bring to public attention the great importance of protecting bird life. It is accordingly deserving of the cordial support of all good citizens.

The increased interest in rural life, and in

WOOD THRUSH

every phase of nature study attendant upon the back-to-the-land movement has found its orderly expression in wisely conceived and admirably executed activities for bird-protection clubs and societies. These organizations have taken up the work with serious purpose which has already brought about remarkable results. Winter feeding of birds, planting of shrubs bearing berries to their taste, protecting nesting sites, and the placing of birdboxes, in short, being a real friend of the birds has done much to increase their numbers and to bring them close about our homes, both in city and country. So much interest has been aroused it may even be said the crisis is passed, the low-water mark reached, and the tide is now at flood with a strong, deep current of public opinion behind it, that makes quite certain even better conditions year by year. But earnest, united, and sustained action will be necessary to keep the tide moving in the right direction. The fact that such a good beginning has been made should occasion no laxity, but serve as a stimulus to greater activity on behalf of the birds. The great importance of conserving all our material resources, of protecting beyond the possibility of extinction the rich fauna with which Nature has so generously endowed this country, together with the dire need of protecting food crops has given tremendous impetus to this movement.

Better protection of game birds, Ruffed-grouse, Snipe, Quail, Woodcock, etc., is already under way. Who can tell what favorable results may be realized from encouraging Bob-white to

become a summer denizen of the potato field? None can deny the charm of his presence, announced by his plaintive cry, one of the most alluring call-notes heard in all birdland. Well authenticated reports are at hand of Bob-white's very successful protection of the potato patch from its all too common foe. In our garden a Rose-breasted Grosbeak has been seen regaling himself upon the fat grubs of the potato beetle with a zest that betokened great fondness for these delicacies. How better could one secure even partial immunity for the potato field than to encourage Quail and Grosbeak to take up residence there? Would it not be worth our attention to insure them a full guaranty of protection if for no other purpose than to attract such beautiful and interesting neighbors? Very laudable and successful efforts have been made by public-spirited citizens keenly alive to the necessity for protecting the birds, toward establishing bird reservations. Beginning in 1913, through the efforts of the Audubon Society, several islands along the coast of the Southern States, which are all the year homes of several varieties and winter feeding ground for numerous migrants, have been designated by Federal authorities as places where birds shall be free from molestation by man. This movement has extended until there are in all some seventy such reservations scattered through the Western States—even to far-away Alaska. To be sure, adequate funds from Federal sources have not been available to properly police these isolated tracts, yet the amount available, supplemented

by the funds and splendid efforts of the Audubon Society, has accomplished much, and the outlook is most encouraging.

In addition to these natural reservations, private citizens, and, in some instances, municipalities have established sanctuaries. Considerable tracts have been made safe for nesting sites, and generally attractive both to summer and winter residents. This is an excellent example of the awakened interest in a very important field. Why may not every farmer increase the fullness of bin and mow by making provision of sanctuary for his bird visitors?

Another constant menace to birds, especially to those that become trustful summer residents of lawn and orchard, garden and barn, is the ubiquitous cat. Much attention has been given by bird lovers in recent years to the destruction wrought by this favorite pet, with the result that many who were formerly ardent and constant partisans of tabby have come to look upon her race with increasing disfavor. For it has been learned through many tragedies of the nest that one may not have both close bird friends and cats as pets, unless the latter are confined, or restricted by some device from depredations upon birds which seem a natural phase of feline instinct. When it has come to a matter of choice in some cases at least, probably in many, the house pet has been eliminated to the great joy of the feathered folk.

We have not had a cat about our house in summer for many years, and in consequence, our bird friends have been both numerous and

intimate. Tree Swallow and Song Sparrow, Chippy and Sebec, Blue Bird and Barn Swallow, Robin and Phœbe, have come close about, nesting in the woodbine on the house and in the little boxes placed for them. In the thick grass fields close by, the summer colony is large, including Bobolinks, Meadow Larks, Sandpipers, Savanna, Song and Vesper Sparrows, with Kingbirds and Cherrybirds in the orchard. We are convinced that the presence of cats would appreciably lessen the number of these trustful friends of ours. The mellow notes of the Black-billed Cuckoo as he slyly rests for a time hidden in the thick top of a shade tree on the lawn on a sultry August day, having regaled himself, perhaps, upon the juicy inmates of some caterpillar tent, is a far greater joy to us than could be experienced from the presence of a house cat. And, besides, the destruction of a caterpillar nest is neither a clean nor a pleasing task for the caretaker of the lawn.

Startling figures relating to the destruction of birds by cats have been given by those who have looked deeply into the question. In a single season a house cat has been known to kill fifty birds. That they destroy annually in the United States several millions of valuable birds seems a conservative estimate. It is believed that annually the seventy thousand cats in Massachusetts kill ten birds each, making an appalling total of seven hundred thousand birds. In this ratio throughout the whole country the destruction would be almost incredible.

There are many other natural enemies of the birds both in feathers and fur. Several varieties

of Hawks, Owls, Jays, Shrikes and Crows are recognized destroyers of eggs and nestlings. Just what the extent of this destruction is has not been ascertained, but enough is known to justify the belief that the aggregate constitutes a considerable factor in lessening bird life. Snakes, foxes, skunks, mink, numerous rodents and the noisy red squirrel are among the enemies that prey upon both eggs and young, as well as adult birds. So that the perils are many. A season's daily inspection of the nests in one's neighborhood will reveal so many tragedies that the wonder is that any young survive. Add to these natural marauders the depredations of the house cat, the dangers of migration from exposure, from losing their way in the fog, from striking lighthouses and suspended wires of various sorts, and the wonder grows. The demonstrated ability to face so many vicissitudes and survive in increasing numbers is excellent proof of the hardihood and sturdiness of these feathered friends of man.

Every loyal citizen wherever and whenever opportunity offers should become a self-appointed warden to guard and protect the birds —the natural food conservators of the nation. Is it too much to ask of all thoughtful people, men and women, boys and girls, that they enlist in the ever-increasing army of bird-protectors, ready and anxious to do all in their power to lessen their constant perils? An excellent test of citizenship is one's attitude toward and interest in the conservation of such useful and altogether attractive creatures.

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